systemhound™

V4 User's Guide

version 4.0.5.0
15 Apr 05

systemhound™

V4 User's Guide

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Contact Information

Software Innovations UK Ltd
Kinetic Centre
Borehamwood, Herts
WD6 4PJ
UK
Web: http://www.softwareinnovations.co.uk/

See Appendix D for detailed contact information.

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1: Setup and Configuration of the systemhound server

Server pre-requisites

Hardware	Software
Intel Pentium III 600 or above 256 Mb RAM 200 Mb disk space	Microsoft Windows NT/2000/XP/2003/2003

Note: The **systemhound server** *is defined as your designated Windows NT, 2000, XP or 2003 machine that all systemhound clients communicate to.*

Upgrading to systemhound v4

Before you upgrade, you will need to request a new licence key. Please visit www.systemhound.com or contact your reseller for more information.

To upgrade, we recommend you carry out a clean installation by uninstalling the previous version:

- If you wish to retain the schedules in the Central Configuration, any custom information or customized software, do the following: Copy the `Program Files\systemhound\Release\` from v3.1 to a backup location, then copy sysplugin.dat, upload.dat, avplugin.dat and avcustomer.dat (and custinfo2.dat if present) from `Release\OS\Plugins` to the relevant `Program Files\systemhound\Release\OS\Plugins` folder in v4.

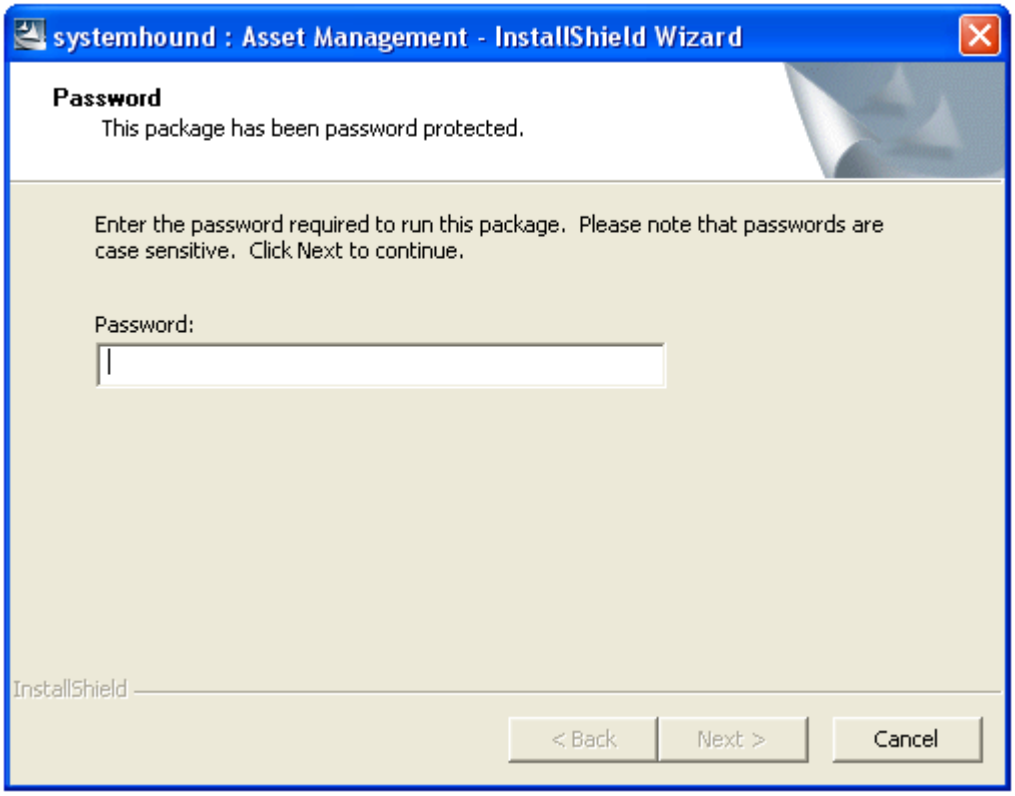
- Your database will be deleted when you uninstall the server, but will be rebuilt automatically as the clients report to the server. If you wish to have a backup of the old data, you can copy the systemhound\easy-audit folder to a backup location, prior to uninstalling the systemhound server; you can now browse this data by clicking on systemhound\easy-audit\index.htm.

Once uninstalled, apply the licence and then proceed with the new installation. The systemhound clients will be automatically updated as they report to the server and it is not necessary to re-install them.

Installing the systemhound server

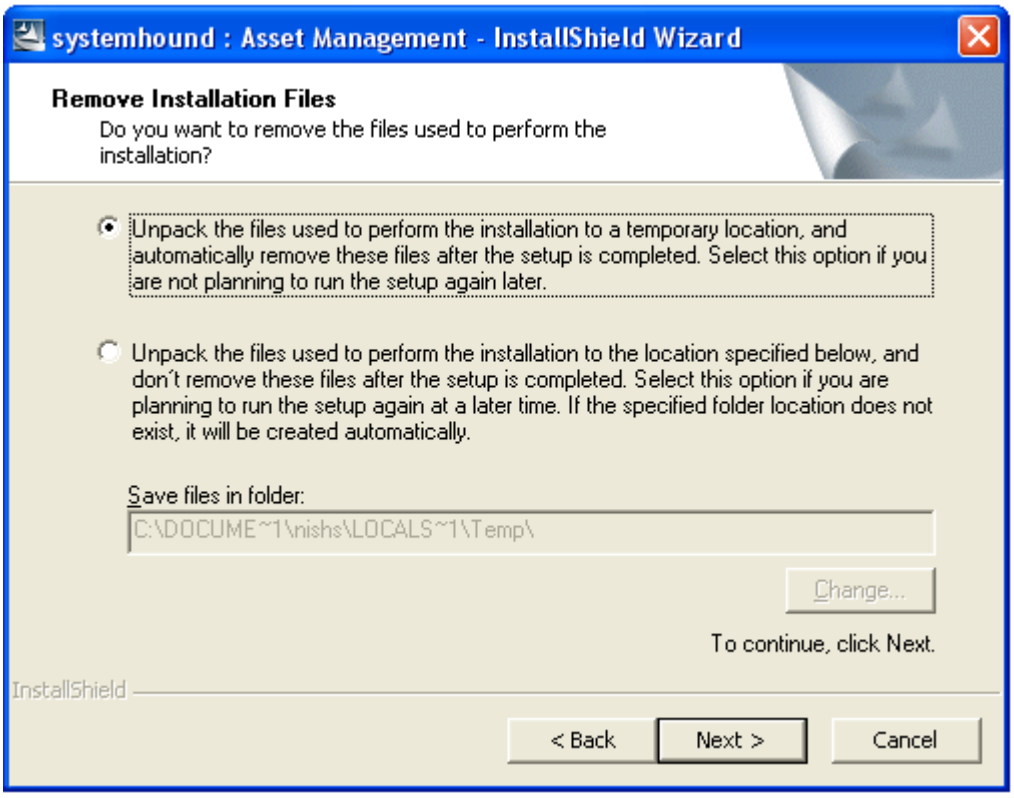
Having prepared a machine that meets the recommended specification above, the systemhound server installation should be started following the procedure outlined below:

1. **Password protection**
   Enter the systemhound installer password. You will receive this in an email or it will be supplied by your software distributor.

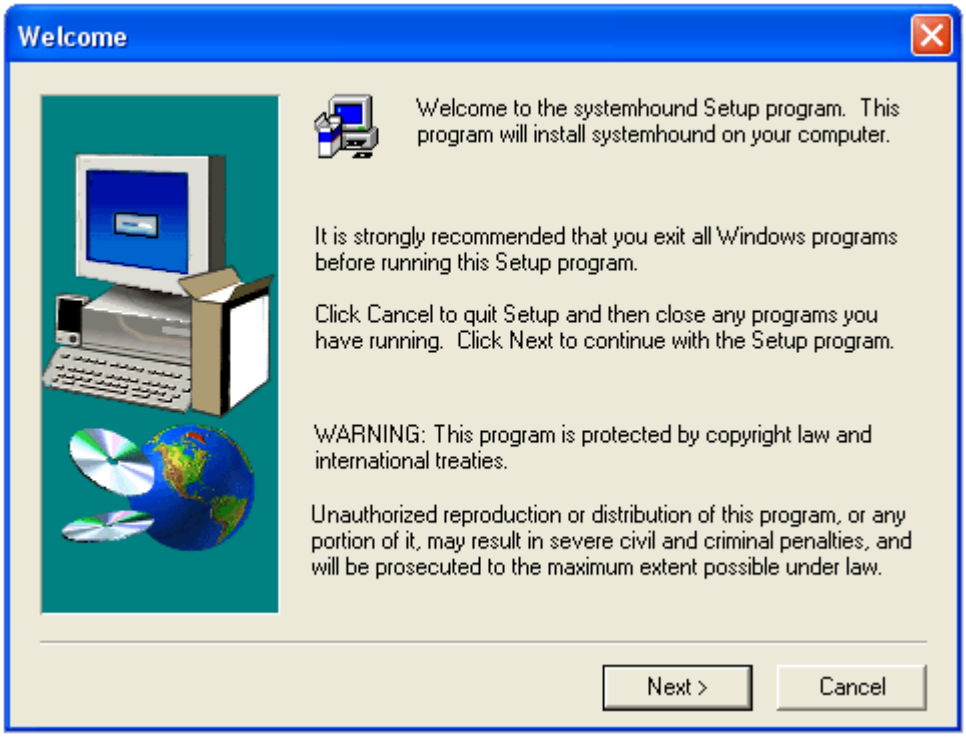

systemhound : Asset Management - InstallShield Wizard
Password
This package has been password protected.
Enter the password required to run this package. Please note that passwords are case sensitive. Click Next to continue.
Password:
InstallShield
< Back
Next >
Cancel

Files
The default option removes all installation files after setup is complete.

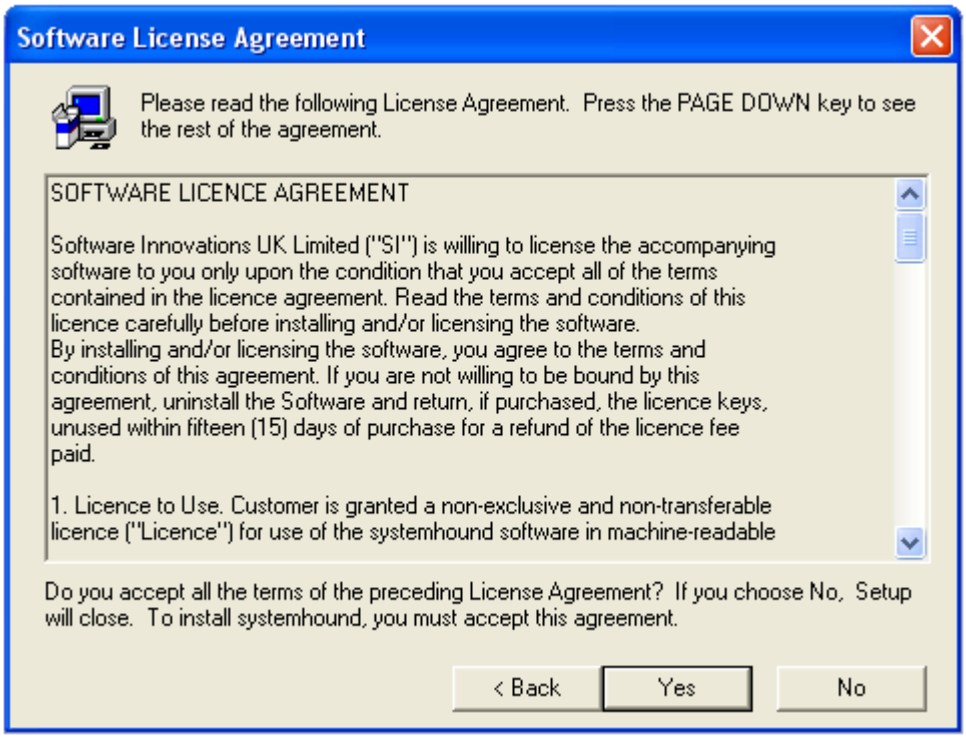
Choose the second option to extract all files to a specific location. The files are not removed from here and can be used to run the setup again at a later date.


systemhound : Asset Management - InstallShield Wizard
Remove Installation Files
Do you want to remove the files used to perform the installation?
Unpack the files used to perform the installation to a temporary location, and automatically remove these files after the setup is completed. Select this option if you are not planning to run the setup again later.
Unpack the files used to perform the installation to the location specified below, and don't remove these files after the setup is completed. Select this option if you are planning to run the setup again at a later time. If the specified folder location does not exist, it will be created automatically.
Save files in folder:
C:\DOCUME~1\nishs\LOCALS~1\Temp\
Change...
To continue, click Next.
InstallShield
< Back
Next >
Cancel

3. Welcome screen
The welcome screen is displayed, click Next to continue


Welcome
Welcome to the systemhound Setup program. This program will install systemhound on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

Copyright information is displayed and you are required to accept these conditions to continue.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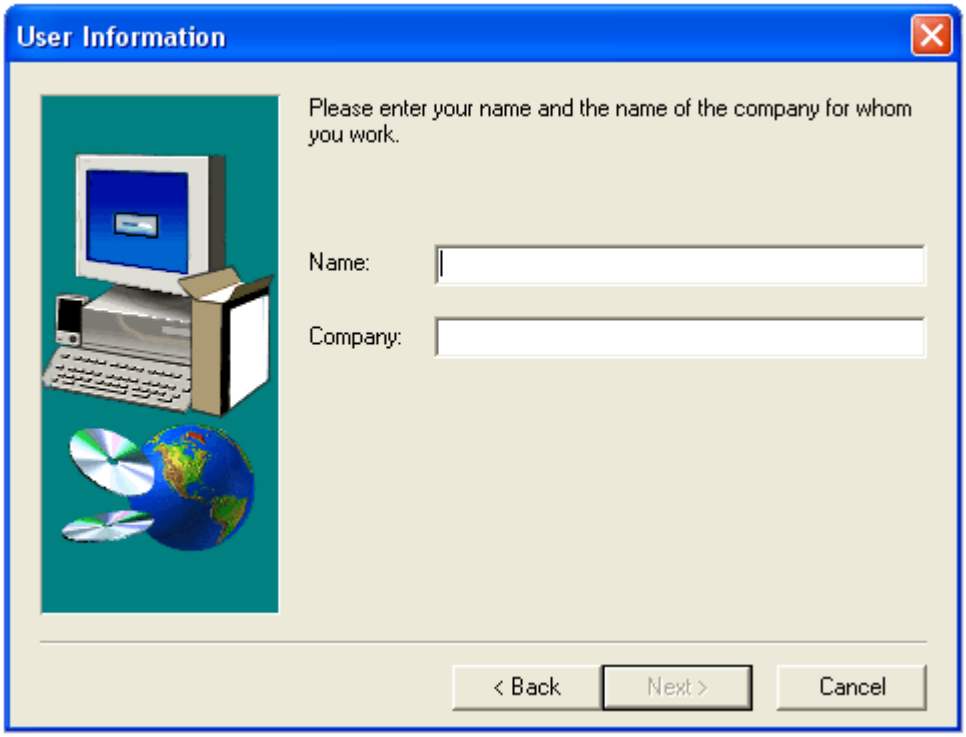
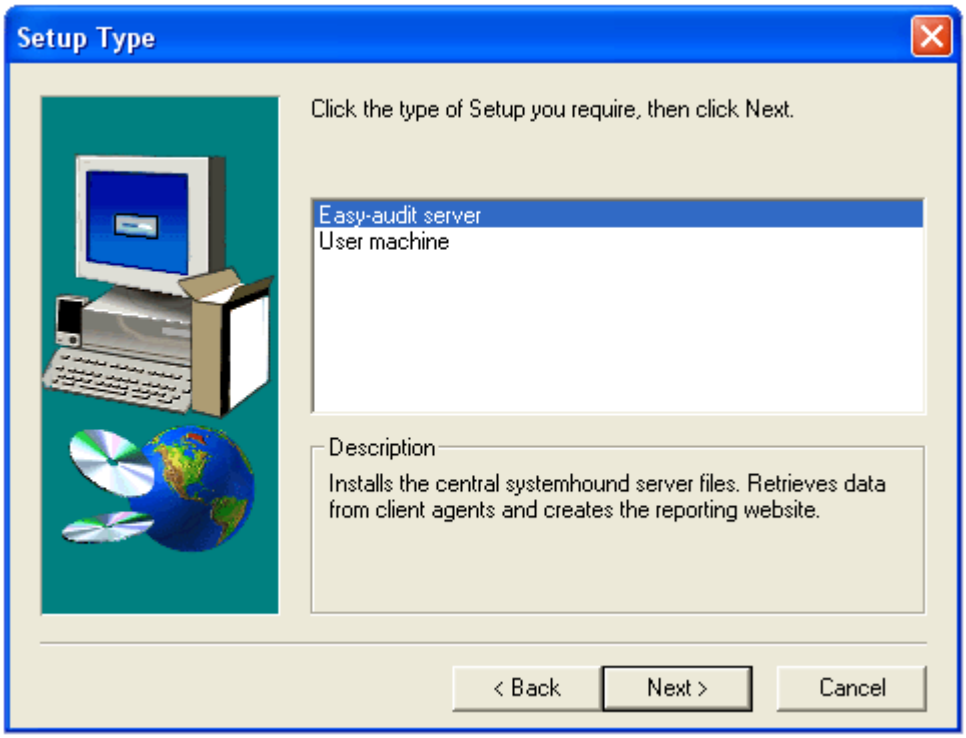
1. Licence to Use. Customer is granted a non-exclusive and non-transferable licence ("Licence") for use of the systemhound software in machine-readable
Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close. To install systemhound, you must accept this agreement.
< Back
Yes
No

5. User / Company information

Enter your name and the company name for which systemhound is being installed



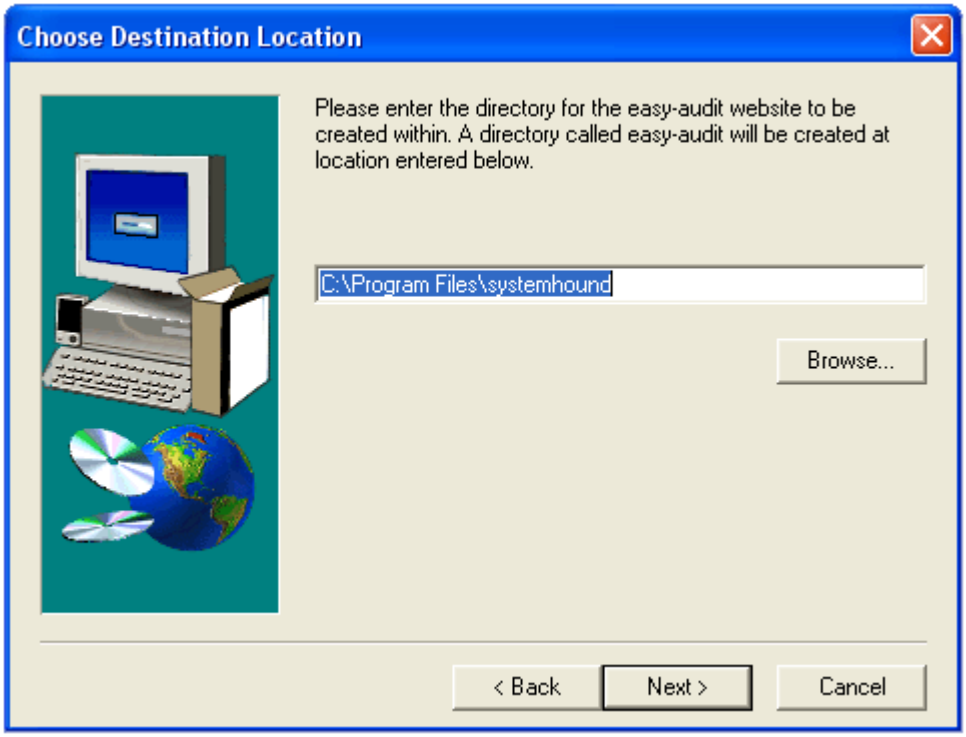
Select 'Easy audit server' to install the software required to run the systemhound easy audit server


Setup Type
Click the type of Setup you require, then click Next.
Easy-audit server
User machine
Description
Installs the central systemhound server files. Retrieves data from client agents and creates the reporting website.
< Back
Next >
Cancel

7. Choose Destination Location

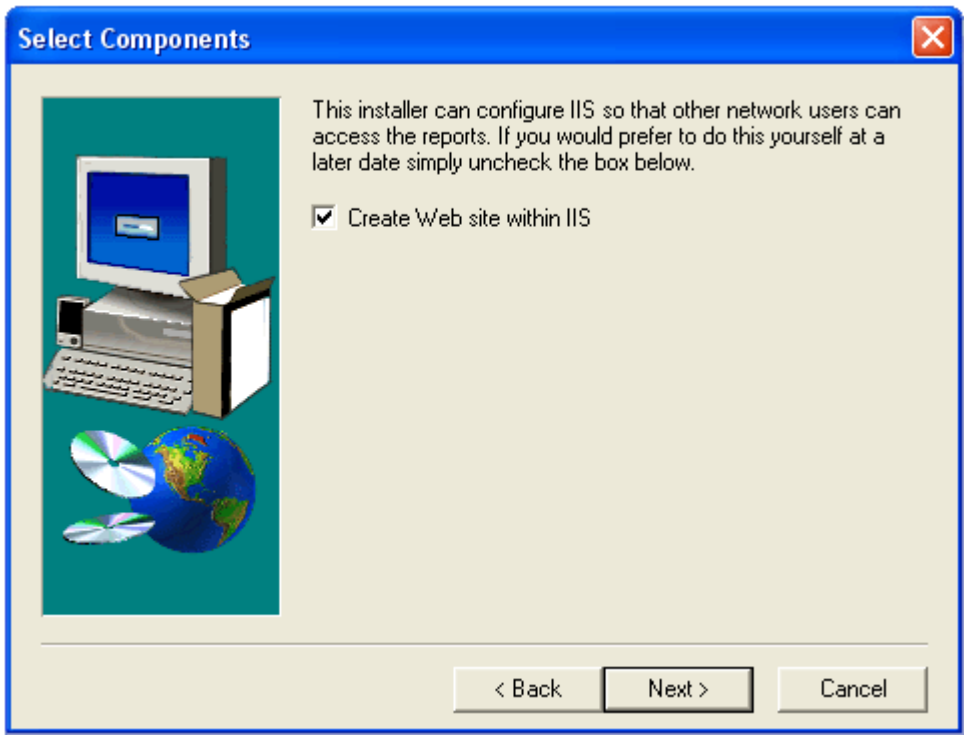
Select the target directory for the easy audit website. A directory called 'easy audit' will be created here & will contain all the files making up the website.

Note that the systemhound server files will always be installed on the system drive, regardless of where you choose to have the website installed.

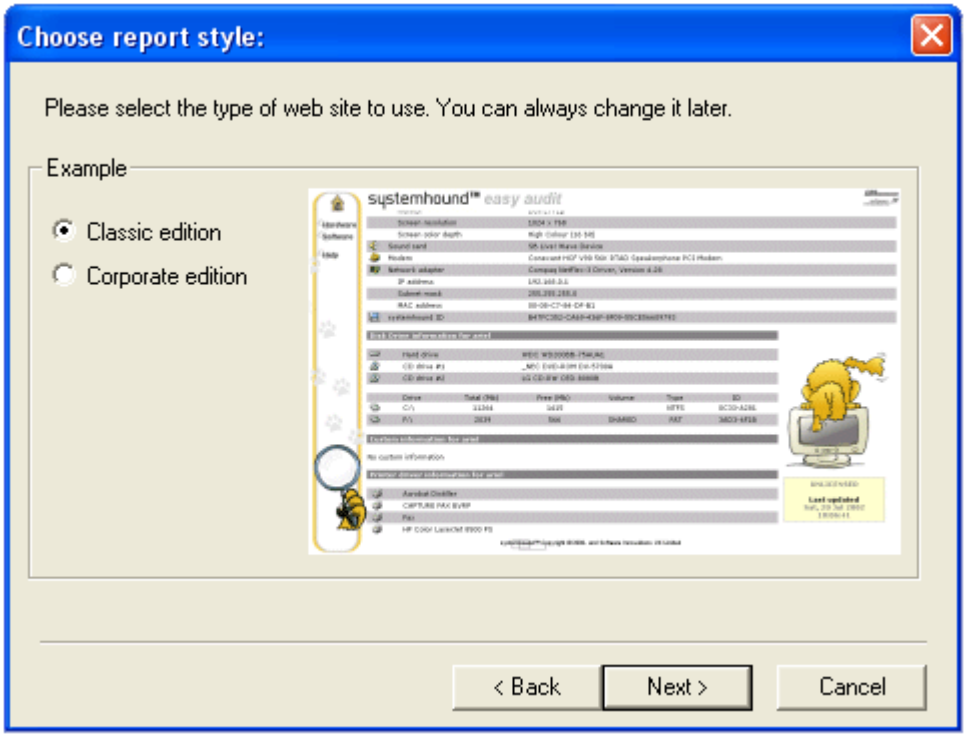

Choose Destination Location
Please enter the directory for the easy-audit website to be created within. A directory called easy-audit will be created at location entered below.
C:\Program Files\systemhound
Browse...
< Back
Next >
Cancel

If the systemhound installer detects IIS installed on the computer, you will be given the option of auto-configuring the systemhound easy audit website. This allows other network users to access the reports. Leave this checked unless you want to manually configure the website or access it through a file share and not IIS.

If IIS is not installed, this dialog will not appear.


Select Components
This installer can configure IIS so that other network users can access the reports. If you would prefer to do this yourself at a later date simply uncheck the box below.
Create Web site within IIS
< Back
Next >
Cancel

9. Choose report style
There are two styles of web reports that you can choose from. Classic is the original 'look' complete with the dogs, while Corporate is a new design, without any dogs or other graphics. Whichever option you choose here, you can always switch easily using the Website Maintenance Tool.



If the installer detects the systemhound server as running Windows XP SP2, then it needs to configure the Windows Firewall to add port 4004 to its Exceptions list. You must choose 'Yes' here, otherwise systemhound clients will not be able to send inventory data back to the systemhound server.

Filewall security
Windows Firewall - IMPORTANT
Setup has detected that this machine is running the Microsoft Windows Firewall, a host-based firewall that discards unsolicited incoming traffic, providing a level of protection for computers against malicious users or programs.
systemhound requires that the Firewall is configured to allow external computers to connect to the "systemhound collector" process, in order to receive asset inventory information.
If you choose not to allow this change to the Firewall, systemhound will not be able to gather and report asset information from other machines.
Do you agree to this change being made? Click 'Yes' if you agree, otherwise click 'No' to exit the install.
< Back
Yes
No

Congratulations! Your systemhound server is now set up to receive information from your user machines. Section 2 shows you how to install systemhound clients on your user machines.

An installation log is created in the WINNT\Temp directory.

2: Installing systemhound clients

User Machine pre-requisites

Hardware	Software
none	Microsoft Windows 95 and above

There are several ways of installing systemhound clients to your user machines:

- **Using the Install Wizard** – the recommended option for installing clients to WinNT/2000/XP/2003/2003 machines; not suitable for Win 95/98/ME.
- **Login scripts** – the recommended way to install for Win 95/98/ME; not suitable for WinNT/2000/XP/2003/2003 as admin privileges are required.
- **Drive Imaging software** – if you distribute software in your enterprise in this way, using *Symantec© Ghost* or other drive imaging technology, you may want to install systemhound clients this way.
- **Silent Install** – an alternative method, using Install Shield© to create a silent install to deploy the clients.
- **Manual install** – using systemhound.exe to carry out a manual install on the client machine.
- **Auditing Stand Alone Machines** – installing clients to non-networked machines

The Install Wizard

This is the recommended way to install clients to Win NT/2000/XP/2003 user machines. You can also use this tool to uninstall systemhound clients from these Operating Systems (see Section 8). You must use an administrator account to use the Install Wizard.

systemhound : Introduction
Welcome to the systemhound remote installation utility. This tool enables you to install systemhound onto multiple Windows NT machines from the systemhound central server. You will require administration account details for the machines you select as targets and you must be running under an administrators account.
Select Mode:
Install
UnInstall
Licensed to :
Software Innovations UK Ltd
License detail :
1 of 5000 used
systemhound.com
< Back
Next >
Cancel

Fig 2.1

1. On the **systemhound server**, go to `Start/Programs/systemhound/Tools/Install Wizard`. This will open the remote install utility as shown in Fig 2.1.

2. Choose the **Install** mode (by default this is selected) and click **Next**

3. The next screen (Fig 2.2) shows the domain / workgroups installed across your Microsoft Windows Network and allows you to select computers to install the systemhound client to. You can select individual machines, a domain or machines by IP range.

4. To select individual machines, click on the '+' sign next to the domain. Highlight a machine from the list and click on **Add**. This machine will now appear in the target client list on the right. If you are not logged in to the domain the machine belongs to, you will be prompted to enter an administration username and password for that domain. This must be entered using the **`domain\username`** format. Note that only Win NT/2000/XP/2003 machines can be installed using the Install Tool; you will not be able to select any Win 9x machines.

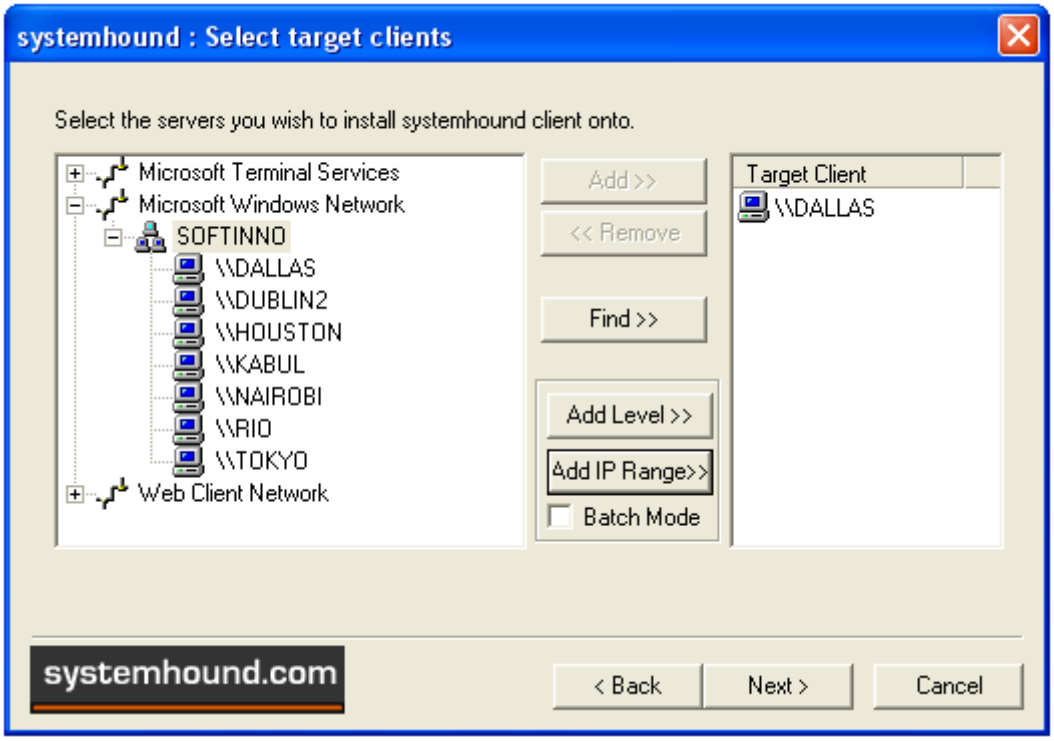


Fig 2.2

5. Alternatively, you can find a machine on the network by name or IP address by choosing the **Find** option as shown in Fig 2.3.

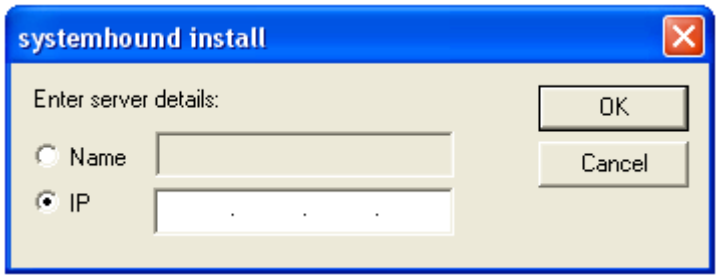


Fig 2.3

6. To select a domain or workgroup to install systemhound clients to, instead of individual machines, highlight the domain/workgroup and choose **Add Level.** This will add all WinNT/2000/XP/2003 machines shown under that domain / workgroup to the list of target clients on the right. It is recommended to check the **Batch Mode** option; this prevents all pop up boxes from showing and eliminates the need for any user input, thus speeding the process of machine selection.

   Pop up boxes will display if a username/password is required (fig 2.4) or to display error messages; these could result from Win 9x machines being discovered on the domain/workgroup that is selected, or if the Install Tool is unable to access the registry on the target machine. Once

the machines have been selected and the clients are installed, you can return to those machines with installation issues. Note that selecting an entire domain can take some time as each machine's suitability for a client install has to be determined; a progress bar (Fig 2.5) will display as this is being carried out.

Fig 2.4

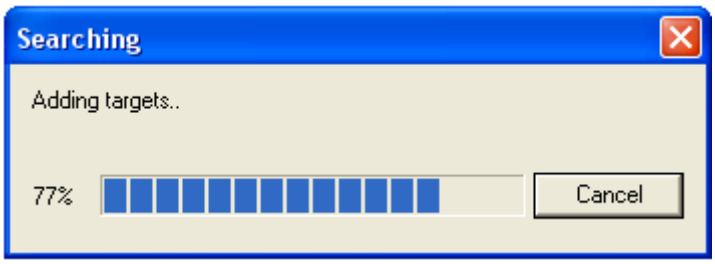


Fig 2.5

7. Clients can also be selected by IP Range. Choose the **Add IP Range** option to discover all suitable machines within a given IP range. A maximum of 255 nodes can be scanned. Input an IP range into the dialog box as shown in Fig 2.6. Click OK to initiate the discovery process, as shown in Fig 2.7. Once this is complete, it will then proceed to check each machine to determine its suitability for a client installation (Fig 2.8). As with using the **Add Level** option, you may find it better to use the **Batch Mode** option to prevent pop up boxes from showing.

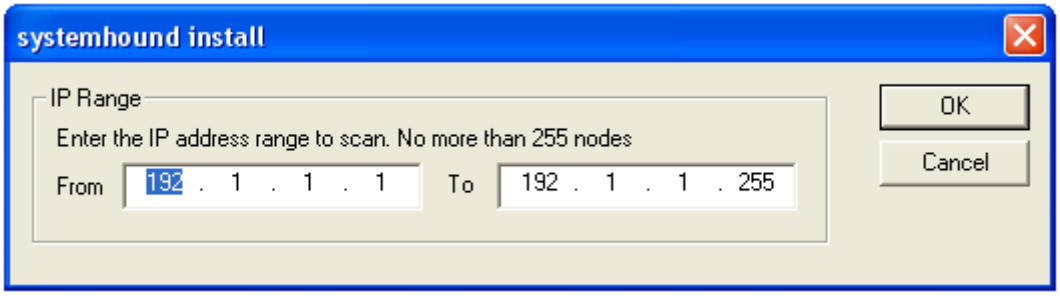


Fig 2.6

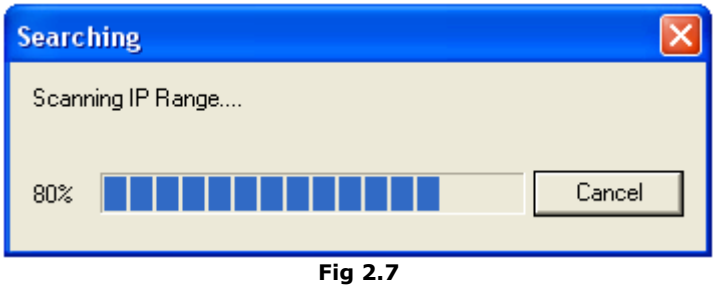


Fig 2.7

Fig 2.8

8. Any machine that is selected for client installation will have an icon to its left which indicates whether a systemhound client has been installed on the machine or not. Hover the mouse over an icon for more details.

	blue	Indicates no systemhound client is installed.
	green	Indicates systemhound client is already present.
	red	Indicates systemhound client is present but not running due to a problem.

9. Once machines for installation have been selected, click **Next**. The next screen shown in Fig 2.9 will indicate the systemhound central server automatically. The central server can be defined by **Name** or **IP.** A server defined by name means it has to be resolved into an IP address by DNS, WINS, etc, whereas a server defined by IP address will always be found. By default, the central server name is displayed.

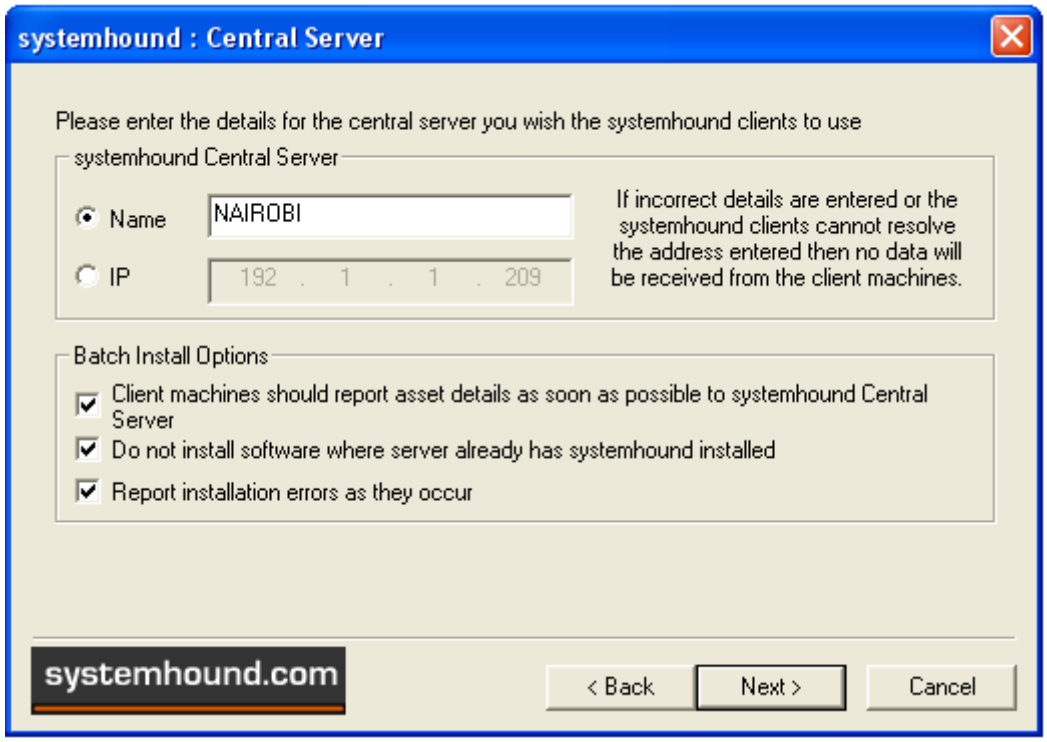

systemhound : Central Server
Please enter the details for the central server you wish the systemhound clients to use
systemhound Central Server
Name
NAIROBI
IP
192 . 1 . 1 . 209
If incorrect details are entered or the systemhound clients cannot resolve the address entered then no data will be received from the client machines.
Batch Install Options
Client machines should report asset details as soon as possible to systemhound Central Server
Do not install software where server already has systemhound installed
Report installation errors as they occur
systemhound.com
< Back
Next >
Cancel

Fig 2.9

10. The following Batch Install Options shown are available:
    - ***Client machines should report asset details as soon as possible to systemhound Central Server*** – upon installation an inventory scan is carried out immediately and shipped to the server. If this is unchecked, an inventory scan will only take place according to the schedule defined for WinNT/2000/XP/2003 in the Central Configuration (see Section 4).
    - ***Do not install software where server already has systemhound installed*** – the client software will not be installed on the user machine if already present. Uncheck this box if you are re-installing a client.
    - ***Report installation errors as they occur*** – indicates that installation will stop at the first error, but you will have the option to carry on. If it is unchecked, the installation will continue

to the end even if errors occur. For example, if the 56th machine failed, it would still install machines 57-100. The installation log file will record details for all client installations. (see Appendix C).

11. Click **Next** to be shown the list of machines selected for installation, as shown in Fig 2.10. Click on **Install** to start the installation process. The client software will now be installed on to the remote user machines.

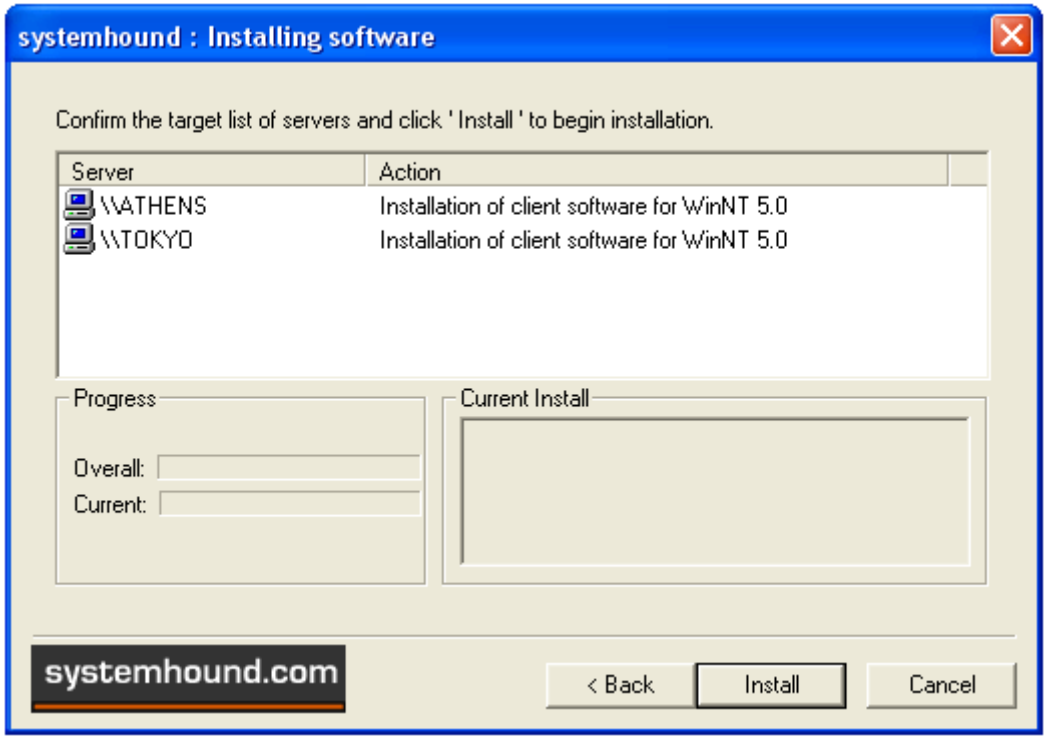


Fig 2.10

12. Fig 2.11 shows the end of a successful install process. A log file of the install process is created as indicated, in the `Program Files\systemhound\logs` folder.

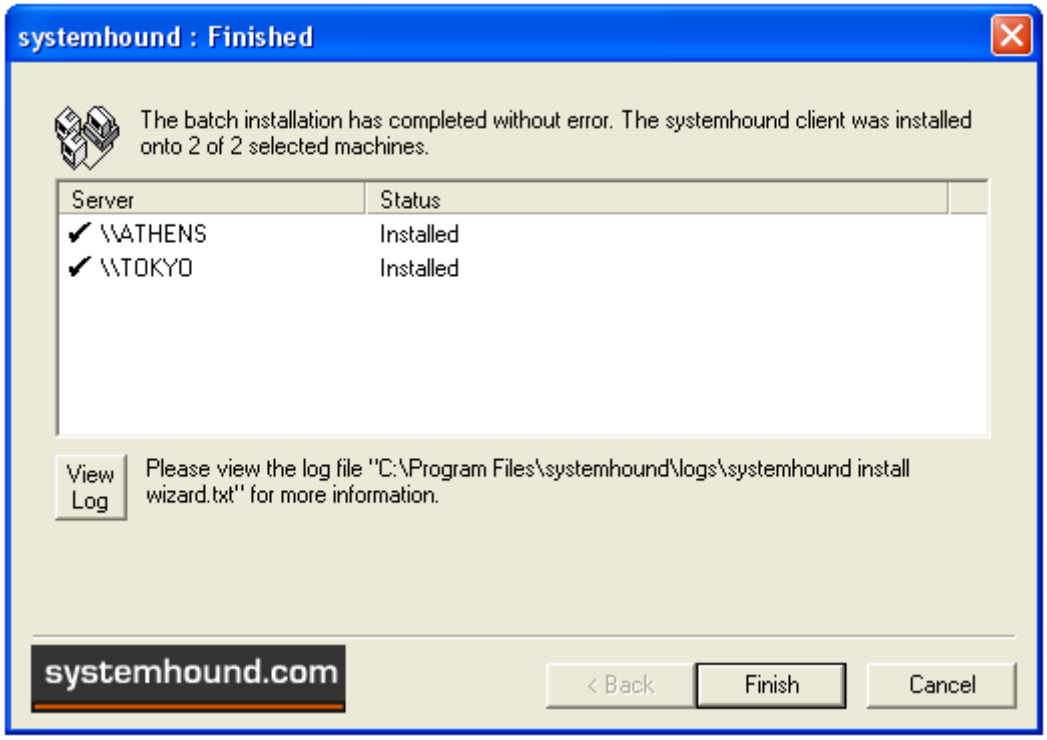


Fig 2.11

Note: A successful installation does not necessarily indicate that client data will be sent to the central server. It simply means the client software has been remotely installed successfully on the target machine. It does not mean the client machine can actually communicate with the server. If there is a networking or other issue, the systemhound client may be unable to send data, which means it will not show on the systemhound reporting. When a client has been successfully installed but does not appear on the reporting, check ***upload.log*** *on the problem client machine in the first instance, for details of any errors. See Appendix C for more information.*

Using login scripts

Remote installation is possible by the use of server login scripts; this method is suitable for Win 95/98/ME but not WinNT/2000/XP/2003 as users will require admin privileges. An inventory will be carried out immediately the client is installed. Use login scripts as follows:

1. Copy the systemhound client executable (**client.exe**) on to a network drive that is visible to users. This program is on the systemhound server in the `Program Files\systemhound\utils` directory.
2. Modify the login script to call the systemhound client when the user logs in to the server.
3. The systemhound client software will automatically be installed from the systemhound server.

Sample session

1. The client executable is copied onto an NT server, visible to all users as '\\NTSERVER`.

```
COPY C:\Program Files\systemhound\utils\CLIENT.EXE \\NTSERVER\UTILITIES\
```

2. The server login script is modified to automatically invoke the systemhound Client program on user login.

```
\\NTSERVER\UTILITIES\CLIENT.EXE -INSTALL -HOST SH_SERVER
```

Note: 'SH_SERVER' should be replaced with the machine name or TCP/IP address of the systemhound server.

3. The systemhound program directory, executables and plug-ins will be downloaded from the systemhound server and installed to the user machine.

Deployment via Drive Imaging Software

Deployment of systemhound using drive imaging technologies such as Symantec© Ghost© requires special consideration. The server allocates each systemhound client a unique id. Therefore, when deploying systemhound via drive imaging software you must follow the following steps prior to taking an image that includes systemhound:

1. Stop the systemhound scheduler service on the machine.

   Windows NT/ 2000/XP/2003 (administrative rights are required)
   Stop the systemhound scheduler service via services within control panel

   Windows 95, 98 & ME
   Start\Run "c:\program files\systemhound\shservice.exe" -stopall

2. Delete all files under `c:\program files\systemhound\logs`

3. Delete the registry values **machine_id** and **machine_id2** from under HKEY_LOCAL_MACHINE\SOFTWARE\systemhound key using the *regedit* utility

Note: If the machine is rebooted whilst on the network the above steps must be repeated to ensure the client does not re-register itself with the systemhound server.

Deployment via InstallShield© silent install

The systemhound installer fully supports the use of the InstallShield Silent Response File to silently install systemhound with your desired configuration. There is no need for a user to monitor the installation and provide input via dialog boxes. This method creates an entry in Add/Remove Programs, thus making it easy for the software to be uninstalled later.

1. Extract the original InstallShield © installer from the single systemhound install executable into a shared directory using WinZip © or similar. Alternatively, run the installer again, choosing to unpack the files to a specific location (see step 2 in Section 1). The uncompressed installer consists of 18 files.

2. Run the installer in ***record mode*** using the -r argument e.g. setup –r

3. Install the product with your desired settings

4. Copy the Installer response file setup.iss from the windows directory to the installer directory created in step 1. You should now have 19 files.

5. Now run the installer in ***silent mode*** using the -s and –SMS arguments e.g. setup –s -SMS. The installer will run, invisible to the user, reading its response from setup.iss.

6. Success of the installation can be determined by examining setup.log

Note: Deployment on Windows NT/2000/XP/2003 requires the installing user account to have sufficient rights to install services.

Further reading

You may find the following Install Shield© knowledgebase articles useful.

Q101901: HOWTO: Creating a Silent Installation

Q102894: INFO: What Command Line Parameters Are Available for Setup.exe?

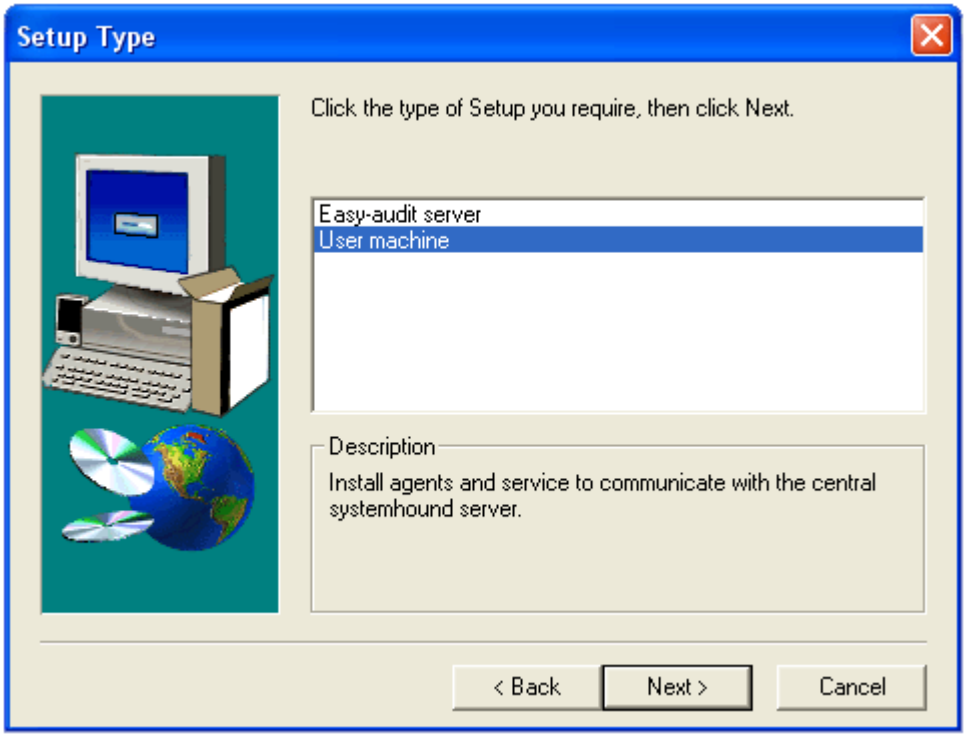
The knowledge base is at http://support.installshield.com/kb/default.asp

Manual Install

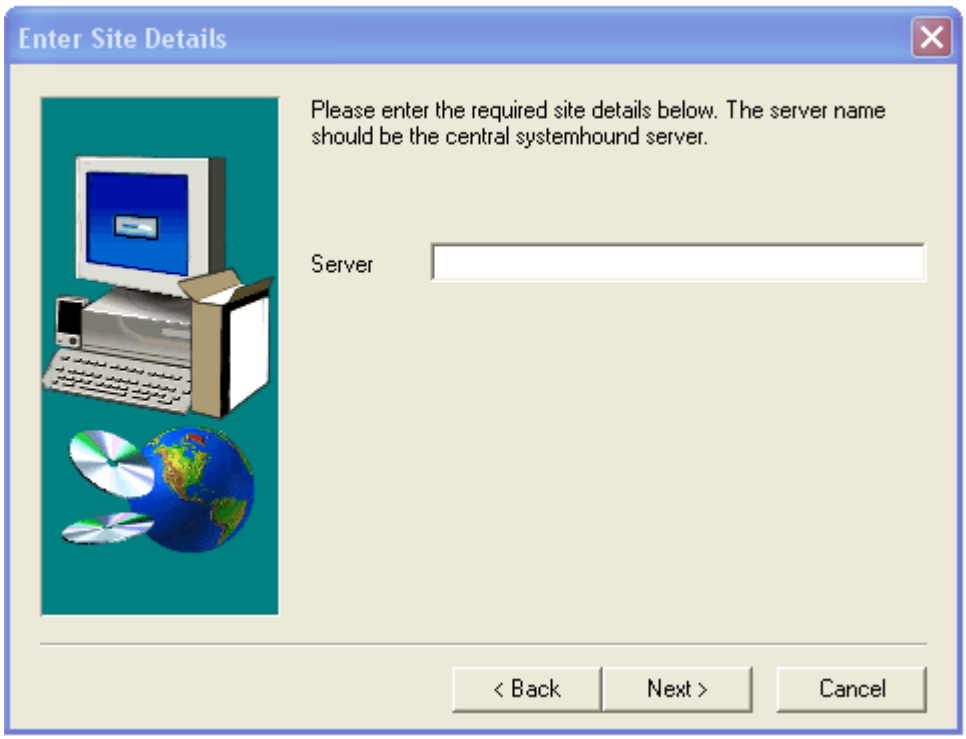
The systemhound client can also be installed using systemhound.exe on a client machine and choosing **User machine** from the setup options. (You should be logged on as administrator to install on WinNT/2000/XP/2003; not necessary for Win 95/98/ME)

Steps 1 – 5 are the same as for setting up the systemhound server. *See Section 1. Setup and configuration of the systemhound server.*

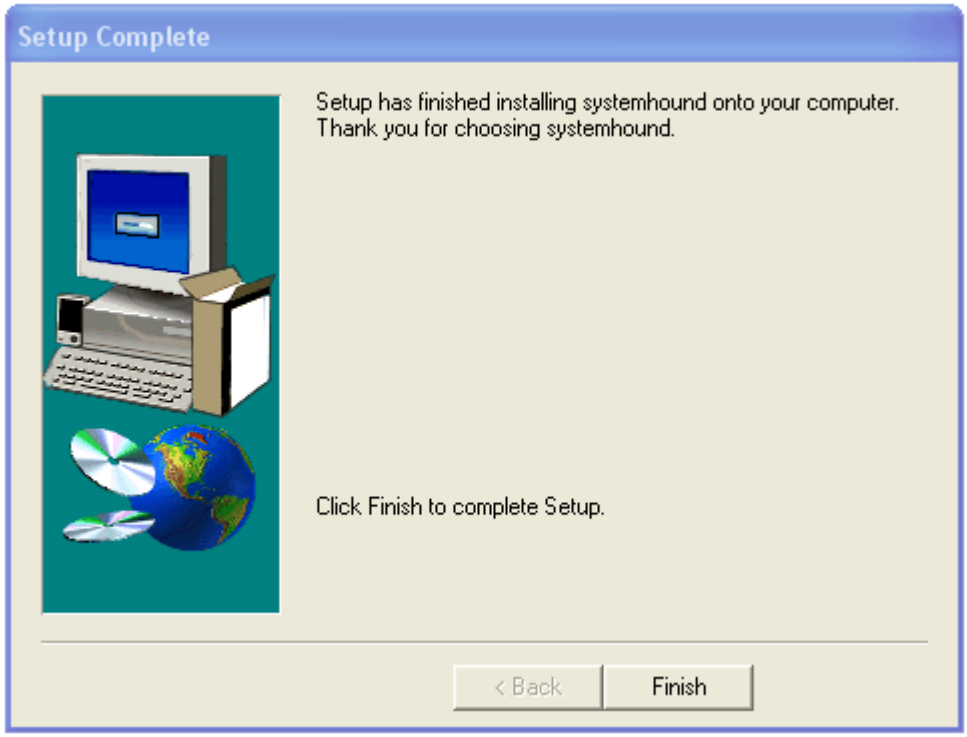
6. **Setup type**
Select 'User machine' to install the software required to send information to the easy audit server


Setup Type
Click the type of Setup you require, then click Next.
Easy-audit server
User machine
Description
Install agents and service to communicate with the central systemhound server.
< Back
Next >
Cancel

server
Type the name of the machine on which you have installed the systemhound server software. When you click 'Next' the installer will attempt to communicate with the systemhound server.


Enter Site Details
Please enter the required site details below. The server name should be the central systemhound server.
Server
< Back
Next >
Cancel

8. **Copying files**
After confirming that it can communicate with the server, the files to run the systemhound client are now copied and installed on to the user machine. Click 'Finish' to close the installer dialog.



An inventory scan is carried out immediately upon installation and the data sent to the server, where it will be viewable on the Web Reports.

Auditing Stand Alone Machines

To audit machines that are not on the network, you need to use the Stand Alone Audit Tool (Fig 2.12). On the systemhound server, go to `Start/Programs/systemhound/Tools/Stand Alone Audit Tool`.

1. Click on **Create Floppy/CDROM** to copy the audit files on to a floppy or CD ROM which you can use to install the client software on the stand-alone machine.

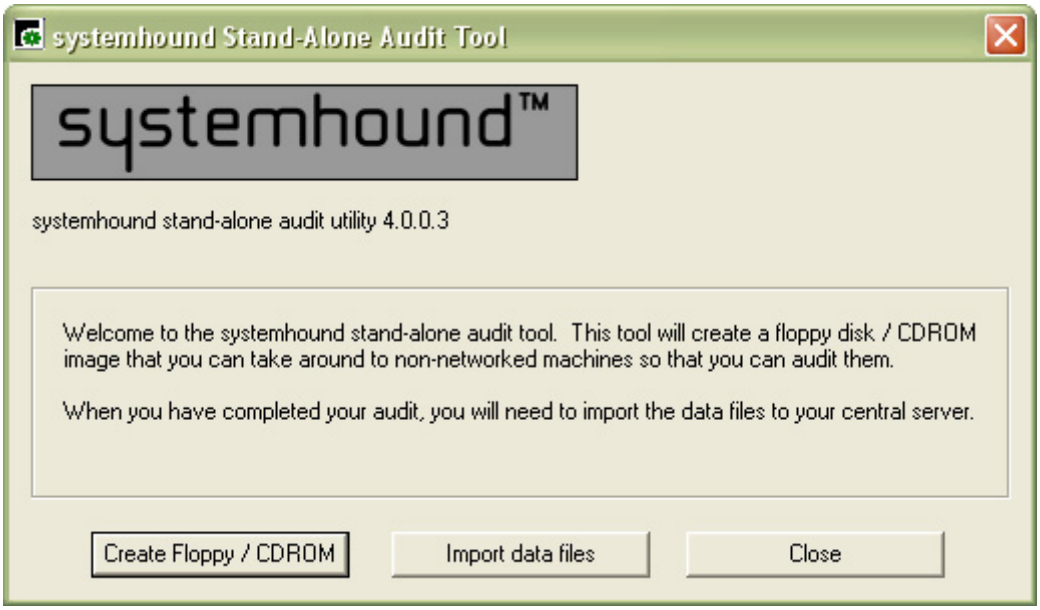

systemhound Stand-Alone Audit Tool
systemhound™
systemhound stand-alone audit utility 4.0.0.3
Welcome to the systemhound stand-alone audit tool. This tool will create a floppy disk / CDROM image that you can take around to non-networked machines so that you can audit them.
When you have completed your audit, you will need to import the data files to your central server.
Create Floppy / CDROM
Import data files
Close

Fig 2.12

2. On the next dialog (Fig 2.13) choose the Operating System applicable, and then the folder on your machine to copy the files to. In most cases, this will be a floppy drive.

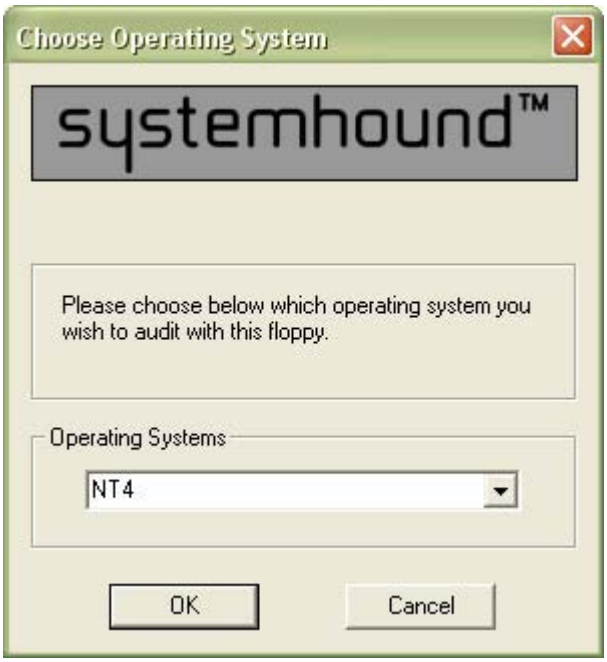


Fig 2.13.

3. The files will now be copied. At the stand-alone machine, insert the floppy and navigate to the drive in Windows Explorer. Double click the RunMe.bat file; an audit will now take place and the audit logfile will automatically be copied to the floppy. Alternatively, run the ShsAudit.exe file and then manually copy the audit logfile to a floppy or other media.

4. Once you have audited all stand-alone machines in this way, the final step is to copy the audit logfiles to the systemhound server so that they can be processed.

5. From the Stand Alone Audit Tool (Fig 2.12), click on Import data file. Navigate to where your audit logfiles are, e.g. the floppy drive. Select the logfile or Ctrl-Shift to select multiple logfiles. The logfiles will now be processed. Click Close to quit the tool. The web reports should reflect the new machines in a few moments.

3: Viewing the inventory reports using the systemhound website

The systemhound reports can be viewed using Microsoft Internet Explorer version 4.01 (SP2) and above. If you chose to configure systemhound to make use of IIS during the installation then the website address will be as follows:

http://your_server_name/systemhound

If you did not have IIS installed or would rather not use IIS, then the website directory (**`Program Files\systemhound\easy-audit\`**) should be shared using standard Microsoft Networking share techniques. Having shared the directory the systemhound easy audit database can be viewed by double clicking on the 'index.htm' file.

To view the web reports on the systemhound server itself, go to **`Start/Programs/systemhound/Web Reporting`**. Depending on the configuration option selected during install, the reports will open with either the Classic or Corporate configuration. You can switch between the two using the Website Maintenance Wizard (see section 6). The web reports are optimised for resolutions of 1024x768 and above.

There are four menu options available, from either configuration:

Home – takes you to the website home page, where you can view your licensing details.
Hardware – displays the hardware summary report.
Software – displays the master software report.
Changes – view hardware and software change history reports.
Help – provides an overview on to how to use systemhound.

Hardware Summary Report

Click on the Hardware button on the menu to show the hardware summary report, as shown in Fig 3.3. The summary report shows the **Machine** host name, **Model**, **Operating System**, **CPU**, **RAM (Mb)**, **C: (Mb)** – the disk space (free and total) on the system drive, and **Updated** – when the machine details were last uploaded to the systemhound server.

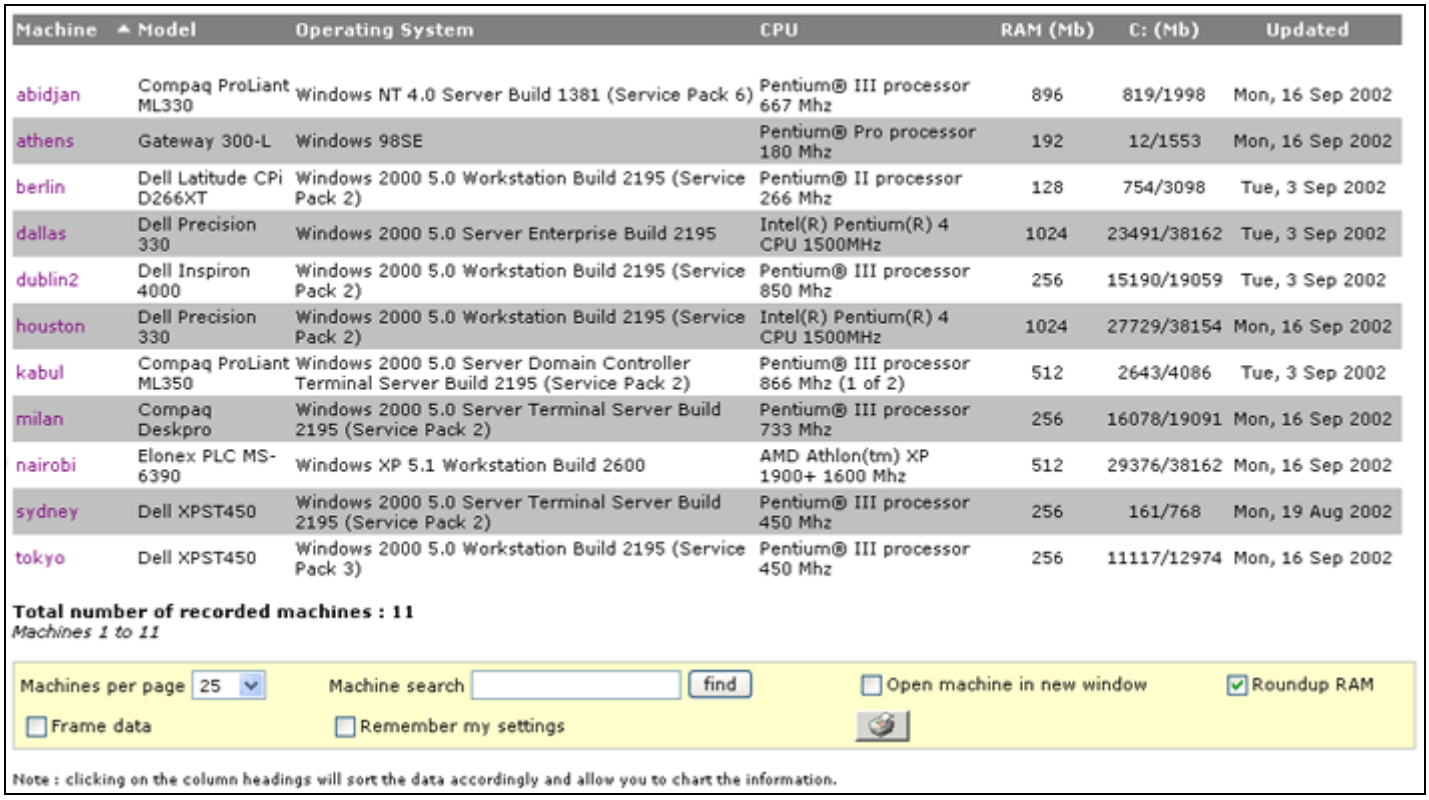
Each machine name is a link; clicking on a machine name opens the detailed hardware report for it. This will open within the same browser window unless you check the **Open machine in new window** option. This is useful as it will open the detailed hardware report in a new browser window, while keeping the summary report open as well.

Choose the number of machines to display from the drop down list – up to 200 can be displayed on one page. As you move through the database, the status bar display on the right hand side of the options menu shows you where you are in the database. (Note: the status bar automatically displays once there is more than one page of machines.) To search for a particular machine, enter in a partial or full name into the search box. Note that the search box is visible only when the fields are sorted by machine, and this field must be sorted alphabetically.

To sort any of the seven fields, click on its name on the header bar. The column that is currently sorted will be identified by a small triangle on its right, as shown next to the 'Machine' column in Fig 3.1. Click again to reverse sort the field.

Sorting the fields by **Model, Operating System, CPU** or **RAM** presents a bar chart icon on the options menu at the bottom. Clicking on this presents a graphical report of the data. For example, sort by Operating System and click on the bar chart icon to display a chart with totals of the different Operating Systems by service pack across your enterprise. See Fig 3.2 and 3.3 for examples of bar charts. Click on

the standard listing button to return to the summary report. Sorting on the Updated field enables you to see which machines have not reported to the systemhound server recently.



Machine	Model	Operating System	CPU	RAM (Mb)	C: (Mb)	Updated
abidjan	Compaq ProLiant ML330	Windows NT 4.0 Server Build 1381 (Service Pack 6)	Pentium® III processor 667 Mhz	896	819/1998	Mon, 16 Sep 2002
athens	Gateway 300-L	Windows 98SE	Pentium® Pro processor 180 Mhz	192	12/1553	Mon, 16 Sep 2002
berlin	Dell Latitude CPi D266XT	Windows 2000 5.0 Workstation Build 2195 (Service Pack 2)	Pentium® II processor 266 Mhz	128	754/3098	Tue, 3 Sep 2002
dallas	Dell Precision 330	Windows 2000 5.0 Server Enterprise Build 2195	Intel(R) Pentium(R) 4 CPU 1500MHz	1024	23491/38162	Tue, 3 Sep 2002
dublin2	Dell Inspiron 4000	Windows 2000 5.0 Workstation Build 2195 (Service Pack 2)	Pentium® III processor 850 Mhz	256	15190/19059	Tue, 3 Sep 2002
houston	Dell Precision 330	Windows 2000 5.0 Workstation Build 2195 (Service Pack 2)	Intel(R) Pentium(R) 4 CPU 1500MHz	1024	27729/38154	Mon, 16 Sep 2002
kabul	Compaq ProLiant ML350	Windows 2000 5.0 Server Domain Controller Terminal Server Build 2195 (Service Pack 2)	Pentium® III processor 866 Mhz (1 of 2)	512	2643/4086	Tue, 3 Sep 2002
milan	Compaq Deskpro	Windows 2000 5.0 Server Terminal Server Build 2195 (Service Pack 2)	Pentium® III processor 733 Mhz	256	16078/19091	Mon, 16 Sep 2002
nairobi	Elonex PLC MS-6390	Windows XP 5.1 Workstation Build 2600	AMD Athlon(tm) XP 1900+ 1600 Mhz	512	29376/38162	Mon, 16 Sep 2002
sydney	Dell XPST450	Windows 2000 5.0 Server Terminal Server Build 2195 (Service Pack 2)	Pentium® III processor 450 Mhz	256	161/768	Mon, 19 Aug 2002
tokyo	Dell XPST450	Windows 2000 5.0 Workstation Build 2195 (Service Pack 3)	Pentium® III processor 450 Mhz	256	11117/12974	Mon, 16 Sep 2002

Total number of recorded machines : 11
Machines 1 to 11
Machines per page 25
Machine search
find
Open machine in new window
Roundup RAM
Frame data
Remember my settings
Note : clicking on the column headings will sort the data accordingly and allow you to chart the information.

Fig 3.1 – the hardware summary report

To display the data in a table format, check the **Frame data** box.

The **Roundup RAM** option is checked by default. To display the RAM where reported unevenly, uncheck this box. For example on some machines, memory may be reserved, and the Operating System may report 191Mb of RAM to systemhound, whereas it should really be 192Mb. The Roundup RAM option will report the memory as 192Mb.

The **Remember my settings** option stores a cookie on your computer with your settings.

The **printer button** lets you print the entire contents of the screen.

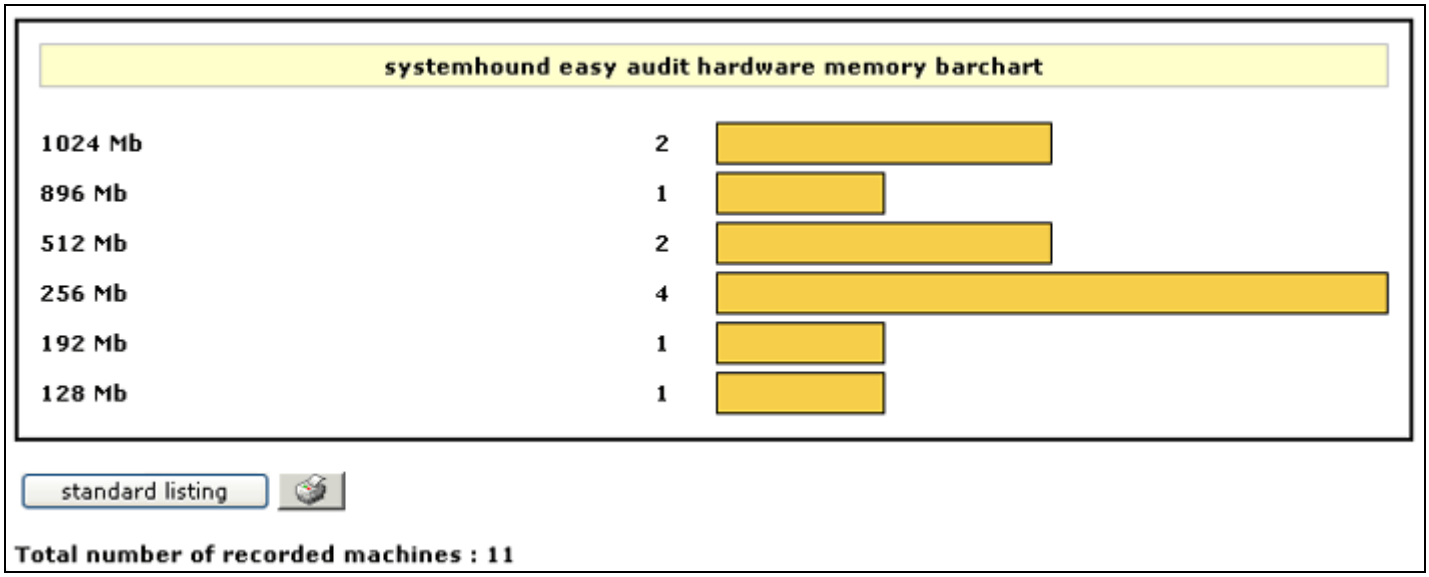


Fig 3.2 – a bar chart of the memory in your network

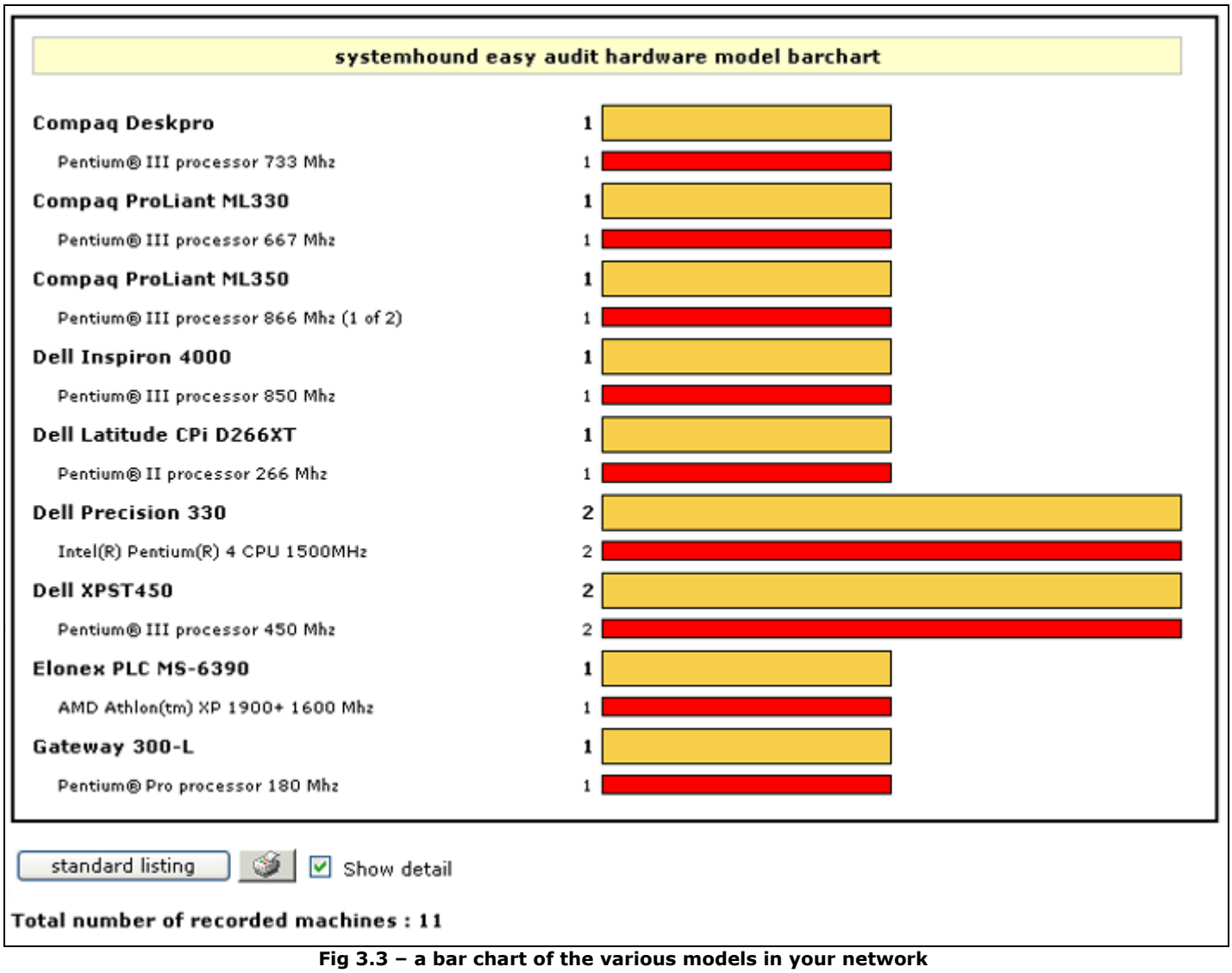

systemhound easy audit hardware model barchart
Compaq Deskpro 1
Pentium® III processor 733 Mhz 1
Compaq ProLiant ML330 1
Pentium® III processor 667 Mhz 1
Compaq ProLiant ML350 1
Pentium® III processor 866 Mhz (1 of 2) 1
Dell Inspiron 4000 1
Pentium® III processor 850 Mhz 1
Dell Latitude CPi D266XT 1
Pentium® II processor 266 Mhz 1
Dell Precision 330 2
Intel(R) Pentium(R) 4 CPU 1500MHz 2
Dell XPST450 2
Pentium® III processor 450 Mhz 2
Elonex PLC MS-6390 1
AMD Athlon(tm) XP 1900+ 1600 Mhz 1
Gateway 300-L 1
Pentium® Pro processor 180 Mhz 1
standard listing
Show detail
Total number of recorded machines : 11

Fig 3.3 – a bar chart of the various models in your network

Hardware Change Report

View hardware changes across your enterprise by selecting the type of changes to view from the drop down list at the top of the summary report or by clicking on the Changes menu button. These are grouped into five areas: **Memory, Processor, Disk, Network Adapter** and **Miscellaneous.** Miscellaneous items are the BIOS, registered user, video adapter and modem information. Examples of hardware changes logged are shown in Fig 3.4 / 3.5.

Systemhound also maintains a record of hardware changes for each individual machine. This comprises all changes logged and is accessed from the detailed hardware report for the machine. Examples of these are shown in Fig 3.6.

Hardware change report for Memory

Mon, 2 Sep 2002

Actual memory	dallas	changed from	*1024 Mb* to 768 Mb
Actual memory	belgrade	changed from	*512 Mb* to 1024 Mb

Tue, 3 Sep 2002

Actual memory	belgrade	changed from	*1024 Mb* to 512 Mb
Actual memory	dallas	changed from	*768 Mb* to 1024 Mb

back to hardware

View hardware change log: Select ...

Fig 3.4 – hardware change report for Memory

Hardware change report for Miscellaneous items

Mon, 12 Aug 2002

BIOS date	nairobi	changed from *27/12/2001* to 04/18/2002

Thu, 15 Aug 2002

Modem	kabul	new hardware V1456VQE-R 56K MODEM PnP

Fri, 16 Aug 2002

Video adapter	tokyo	changed from *NVidia Riva TNT2 Model 64* to NVIDIA RIVA TNT2 Model 64/Model 64 Pro
Modem	belgrade	new hardware V1456VQE-R 56K MODEM PnP

back to hardware

View hardware change log: Select ...

Fig 3.5 – hardware change report for Miscellaneous Items

Hardware change report for dallas

Mon, 2 Sep 2002

Operating system	changed from	*Windows 2000 5.0 Workstation Build 2195 (Service Pack 2)* to Windows 2000 5.0 Workstation Build 2195 (Service Pack 3)
Memory chips	changed from	*256Mb+256Mb+256Mb+256Mb* to 256Mb+256Mb+256Mb
Memory slots	changed from	*4 of 4 used* to 3 of 4 used
Monitor	changed from	*Default Monitor* to Plug and Play Monitor

Mon, 2 Sep 2002

Actual memory	changed from	*1024 Mb* to 768 Mb

Tue, 3 Sep 2002

Actual memory	changed from	*768 Mb* to 1024 Mb
Memory chips	changed from	*256Mb+256Mb+256Mb* to 256Mb+256Mb+256Mb+256Mb
Memory slots	changed from	*3 of 4 used* to 4 of 4 used

Tue, 3 Sep 2002

Operating system	changed from	*Windows 2000 5.0 Workstation Build 2195 (Service Pack 3)* to Windows 2000 5.0 Server Enterprise Build 2195

dallas hardware

report end

Fig 3.6 – hardware changes for an individual machine

Detailed Hardware Report

To view the detailed hardware report, click on a machine name from the hardware summary report. This opens a detailed report, as shown in Fig 3.7. The information is listed under the following fields:

registered user, last logged in user and domain, registered organization, operating system, SMBIOS level, manufacturer, model, BIOS date, asset id, processor, actual memory, memory chips, slots and maximum memory, video adapter, monitor, screen resolution and color depth, modem, network adapter, IP address, subnet mask, MAC address, systemhound id, disk drives, custom information, notes and printer driver information.

Not all fields may necessarily be shown, if the information was unable to be retrieved. This generally only applies to older machines or manufacturers that do not have the information within SMBIOS. In this case, the field may show as 'unknown'.

Fig 3.7 also shows user-defined information. For details on how to enter this data, see Section 4. Free form notes can also be entered, see Section 6.

At the bottom of the detailed report are three menu options allowing you access to the hardware and software change logs for that machine, as well as its software report.

Detailed hardware report for kabul

Registered user	Alexander Wuchinski
Last logged in user	alexw
Last logged into domain	LON28
Registered organisation	SI
Operating system	Windows 2000 5.0 Domain Controller Build 2195 (Service Pack 2)
SMBIOS level	2:3 D02/F02 System ROM
Manufacturer	Compaq
Model	ProLiant ML350
BIOS date	05/21/2001
Asset ID	8110FDV21034
Processor #1	Pentium® III processor 866 Mhz
Processor details	6:8:6
Processor #2	Pentium® III processor 866 Mhz
Processor details	6:8:6
Actual memory	512 Mb
Memory chips	256Mb+128Mb+128Mb
Memory slots	3 of 4 used
Maximum memory	2048 Mb
Video adapter	ATI Technologies Inc. Rage IIC PCI
Monitor	Dell M770
Screen resolution	1024 x 768
Screen color depth	High Colour (16 bit)
Modem	V1456VQE-R 56K MODEM PnP
Network adapter	Compaq Ethernet/Fast Ethernet Adapter/Module
IP address	192.1.1.208
Subnet mask	255.255.255.0
MAC address	00-50-8B-E9-57-F3
systemhound ID	57BDAEC7-F6A3-475A-9090-6974451E8CE1

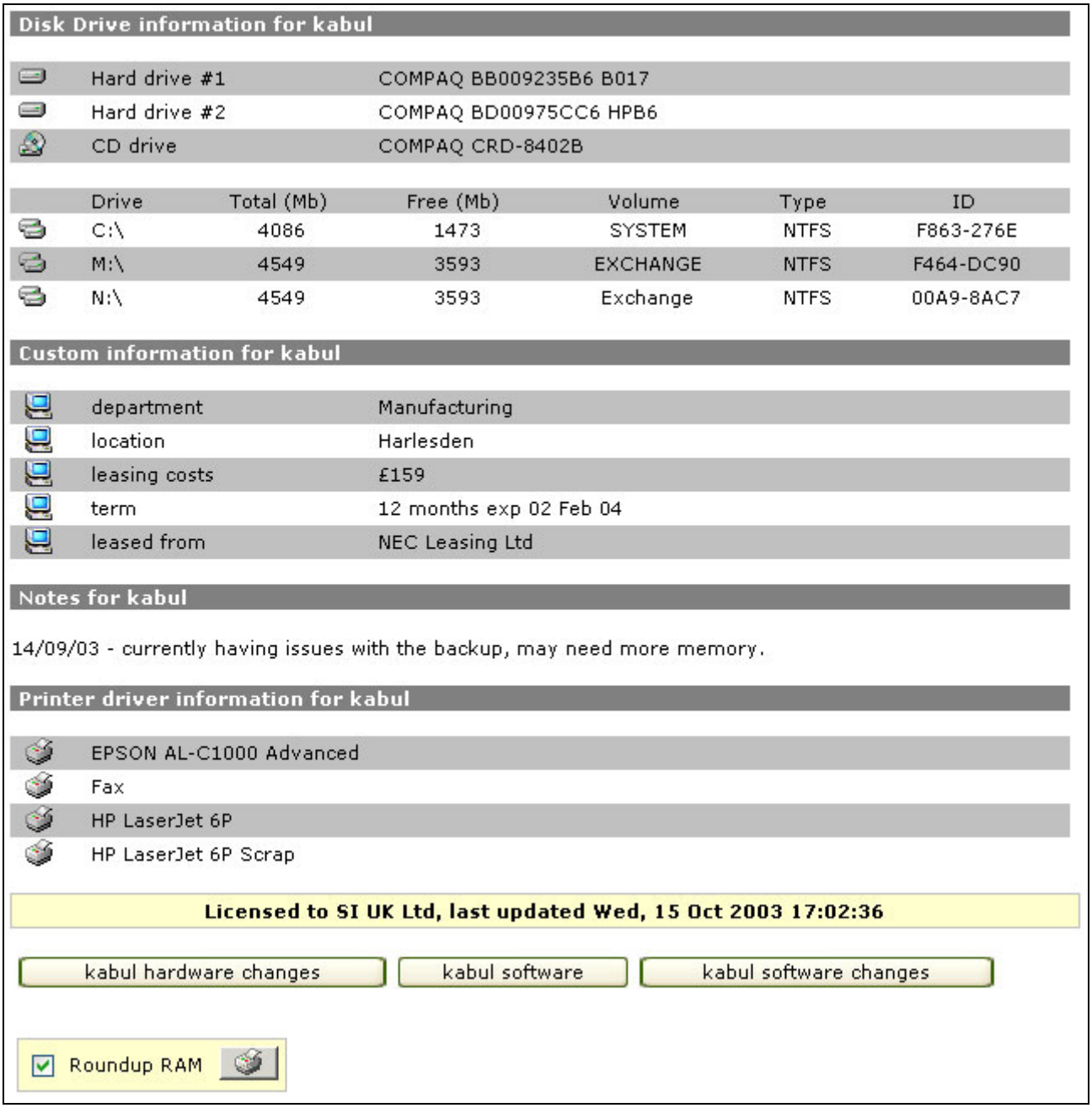

Disk Drive information for kabul
Hard drive #1 COMPAQ BB009235B6 B017
Hard drive #2 COMPAQ BD00975CC6 HPB6
CD drive COMPAQ CRD-8402B
Drive Total (Mb) Free (Mb) Volume Type ID
C:\ 4086 1473 SYSTEM NTFS F863-276E
M:\ 4549 3593 EXCHANGE NTFS F464-DC90
N:\ 4549 3593 Exchange NTFS 00A9-8AC7
Custom information for kabul
department Manufacturing
location Harlesden
leasing costs £159
term 12 months exp 02 Feb 04
leased from NEC Leasing Ltd
Notes for kabul
14/09/03 - currently having issues with the backup, may need more memory.
Printer driver information for kabul
EPSON AL-C1000 Advanced
Fax
HP LaserJet 6P
HP LaserJet 6P Scrap
Licensed to SI UK Ltd, last updated Wed, 15 Oct 2003 17:02:36
kabul hardware changes
kabul software
kabul software changes
Roundup RAM

Fig 3.7 – detailed hardware report for an individual machine

It is also possible to include images of your PC models on the hardware detail report. To do this, make an image of the pc model and save it to **`Program Files\systemhound\easy-audit\images\hardware`**. The filename should exactly match the PC model name. It will now display at the top of the hardware detail report.

Master Software Report

The master software page (Fig 3.8) is accessed by clicking on the Software button shown on the menu. This report displays all applications discovered by systemhound in alphabetical order, along with the number of copies found.

There are a number of options for controlling the display of this report:

Hide Services program data
Hides applications discovered by looking at services running on a machine.

Hide Add/Remove program data
Hides applications discovered by looking at the 'Add/Remove programs' facility in Windows.

Hide Registry program data
Hides applications discovered by looking in the system registry

Only display software counted more than 'n' times
Use this option to hide software that has not been discovered on many machines. For example in an estate of 1000 machines you may want to focus on applications that are located on more than one or two machines. Setting the value to '2' in this case would allow you to do this.

Show licensing information
Select this option to display an extra column that shows the number of licences that you have purchased for a particular application. Applications that do not have a sufficient number of licences will be highlighted. Note: maintain the licence database by using the Website Maintenance Tool (see Section 6).

Show licenced only
Displays only those applications against which licences owned have been entered .

Show Manufacturers
Check this to display the name of the application manufacturer alongside the application name.

Open application in new window
Selecting this option means that when you select an application report by clicking the application name, the report will be displayed in a new window, thus preserving the current master software window for further use.

Manufacturer
Selecting a manufacturer name from the pull down list of manufacturer names will only display applications provided by this company.

Default view
Click this button to restore the view to the default state.

Applications per page
Use this pull down list to specify the number of applications to be displayed on each page. Use the 'Next' and 'Previous' buttons to move through the data.

Remember my settings
Site preferences will be reset if the systemhound easy audit website is not used for a period of 15 minutes unless you have selected the 'Remember my settings' option, in which case the preferences will be retained for 12 months.

Software search
Allows you to search for a particular application by entering a full or partial string.

Navigation bar
A horizontal navigation bar appears when there is more than one page of applications to display. Click along the bar to navigate backwards and forwards through the reports.

Software changes
Click on this button to go to the software change report (Fig 3.11).

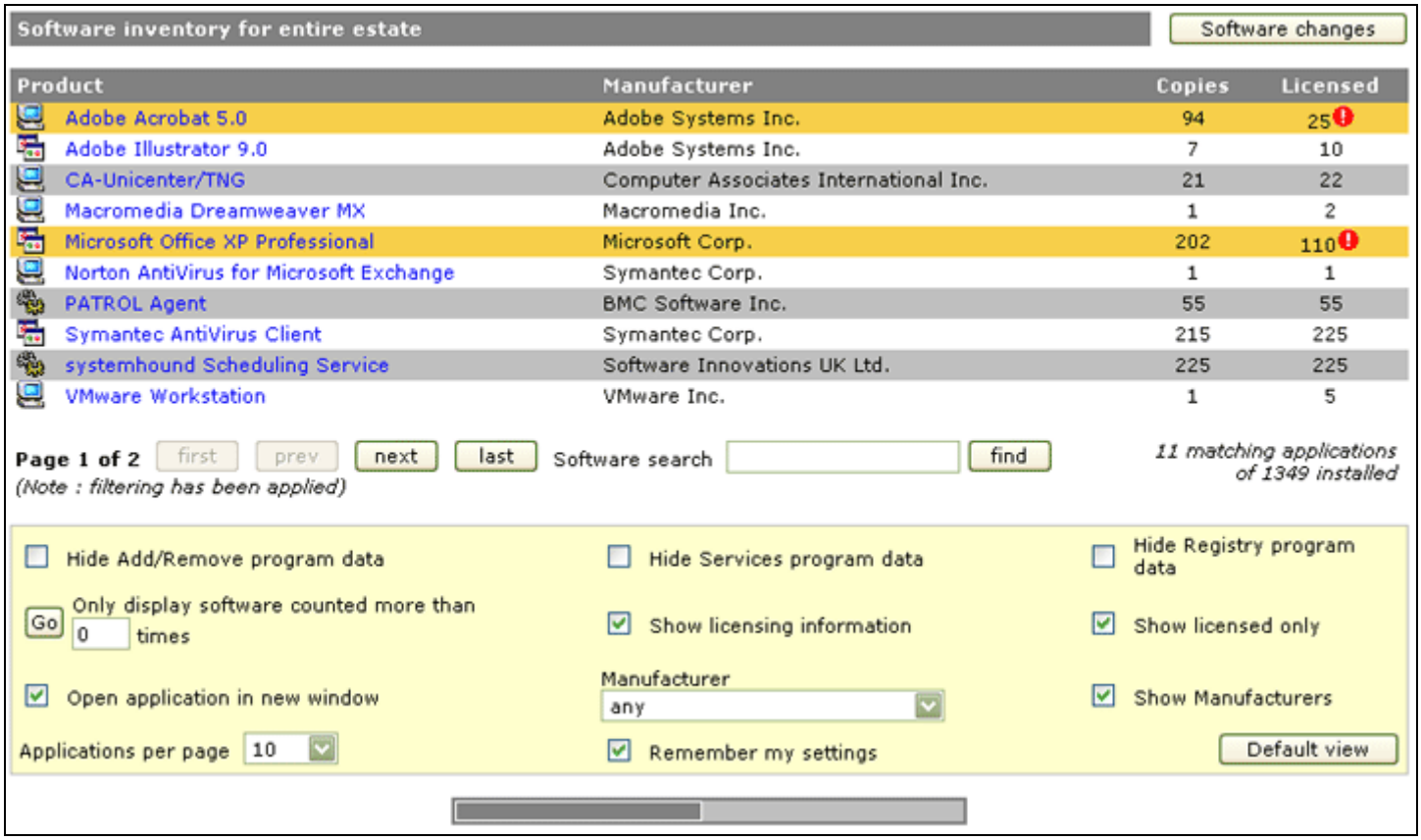


Fig 3.8 – Software report - showing only applications where a licence count has been entered

Individual Application Report

Each entry in the master software report links to display a report for that particular application (Fig 3.9). The individual application report contains details of all the machines currently logged as having that product installed. Alongside the machine name, the version and registered user is also displayed. The report can be sorted on any of these three fields by clicking on the column header.

The number of machines running the application is shown by the 'unique machines' count. In addition the number of locations in which the software has been found is shown. This is because a product may have been found in more than one location on the same machine. For example, in 'Add/Remove programs' and running as a Windows service.

To search for a particular machine or user, select machine or user from the drop down list and enter a search string in the search box. You must either enter the full machine/user name, or part of it. For example, to search for a machine called **saturn**, you should either enter saturn or sat (and not urn).

When the report is sorted by version, an additional drop down list is available; select a version here to display the report from the beginning of that version.

Note: click the '+' located by the side of the application locations to get a summary of locations and the number of instances per location.

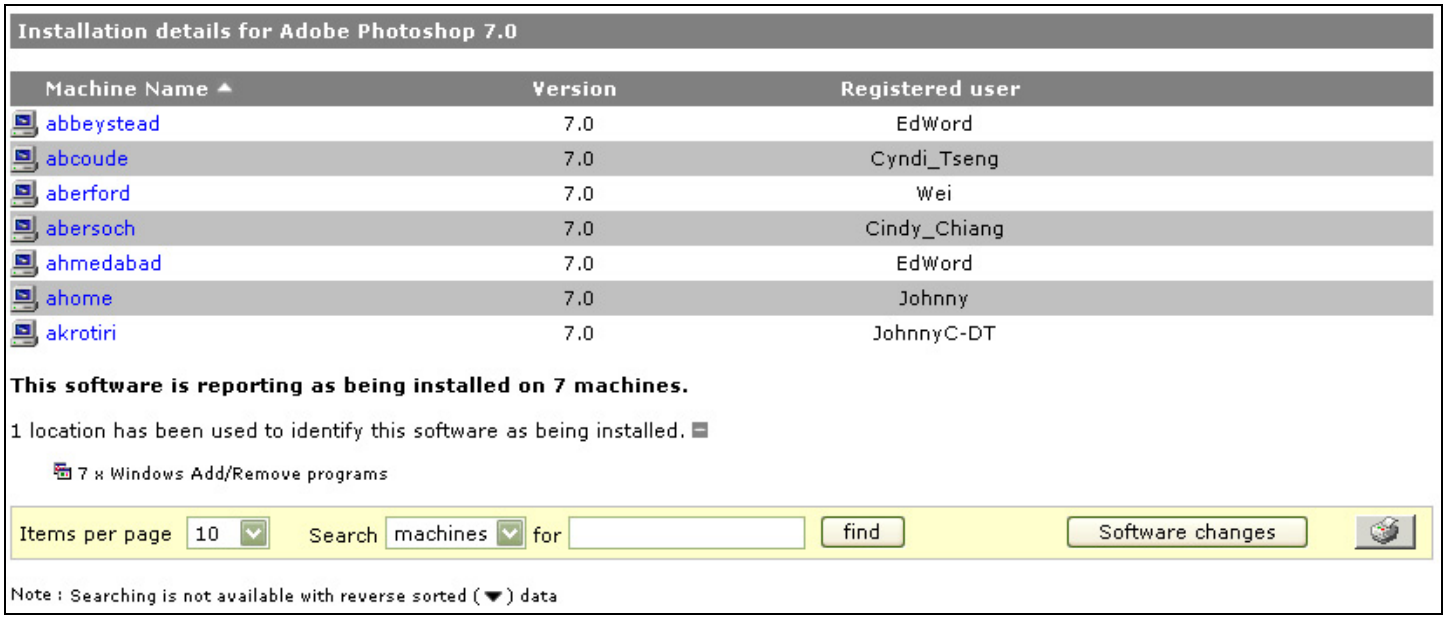

Installation details for Adobe Photoshop 7.0
Machine Name
Version
Registered user
abbeystead 7.0 EdWord
abcoude 7.0 Cyndi_Tseng
aberford 7.0 Wei
abersoch 7.0 Cindy_Chiang
ahmedabad 7.0 EdWord
ahome 7.0 Johnny
akrotiri 7.0 JohnnyC-DT
This software is reporting as being installed on 7 machines.
1 location has been used to identify this software as being installed.
7 x Windows Add/Remove programs
Items per page 10
Search machines for
find
Software changes
Note : Searching is not available with reverse sorted ( ) data

Fig 3.9 – Individual application report.

Software Report for an Individual Machine

In addition to the master software report, you can also view all the software discovered on an individual machine, as shown in Fig 3.10. This report can be accessed in two ways:

- From the hardware details page. Click on a machine name in the hardware summary report to take you to its details page. Click on the machine software button at the bottom of this page.

- From the software report for an individual application. Click on an application name on the master software report to view its individual software report page. Click on a machine name on this page to display that machine's software.

This page can be customized by choosing any of the options shown, such as **Hide Add/Remove program data, Hide Services program data** or **Hide Registry program data**. **Hide duplicate named software** is checked by default. The **Show Details** box enables you to see the exact location of the software. Alternatively, this can be viewed if you hover your mouse over one of the icons to the left of the application name.

Serial (or registration) number information is also displayed on this report.

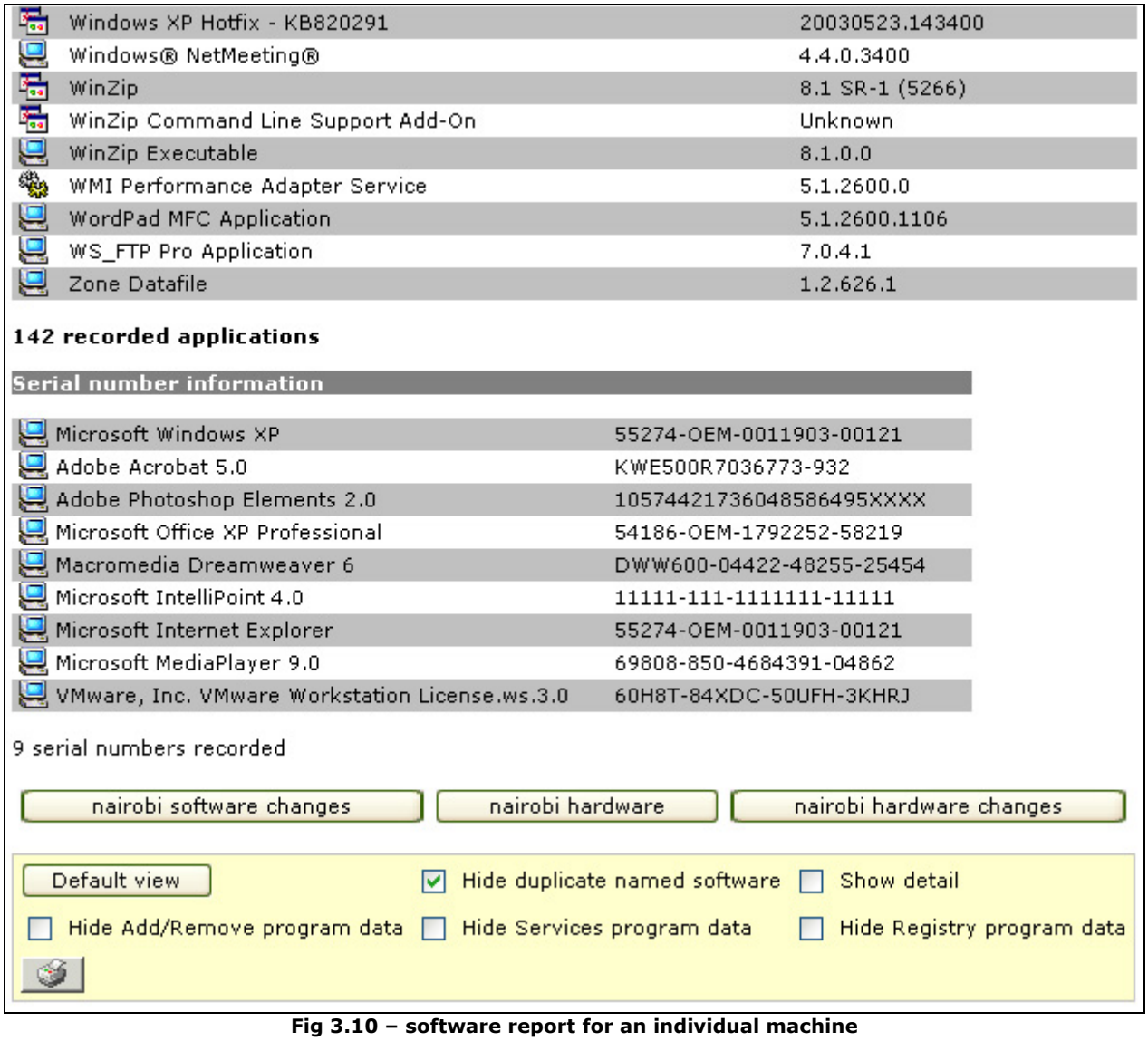


Fig 3.10 – software report for an individual machine

Software Change Report

The software change report displays all software changes as recorded at the time of the inventory scan. The report shows whether an application was installed or uninstalled and the changes can be viewed by application per week, or by all changes per week as shown in Fig 3.11. You can also view an individual machine's software change report; this is a record of all changes logged on that machine.

Changes are restricted to 5000 entries per week. It is possible to increase this figure, but please note that the report will take longer to display. To change this figure, see Appendix E.

To exclude entries that may appear on a frequent basis, e.g. antivirus definitions files, which may appear as installed and uninstalled once a week, you can include the entries in sw_excludes.js in **`Program Files\systemhound\site\`**. Edit the file in Notepad.

To view a software change report by application, select the application from the drop down list.

Note: The software change reports do not correspond to the actual date of occurrence; it corresponds to when the data logfile was received by the server. For example, if an application was installed on 1st March but the machine was then switched off before a scan took place and the client reported to the server, it will only show in the software change report at the time server received the logfile. Therefore if the machine is switched on 10 days later and a scan takes place, it will show up as an installed application in the report for the 2nd week of March.

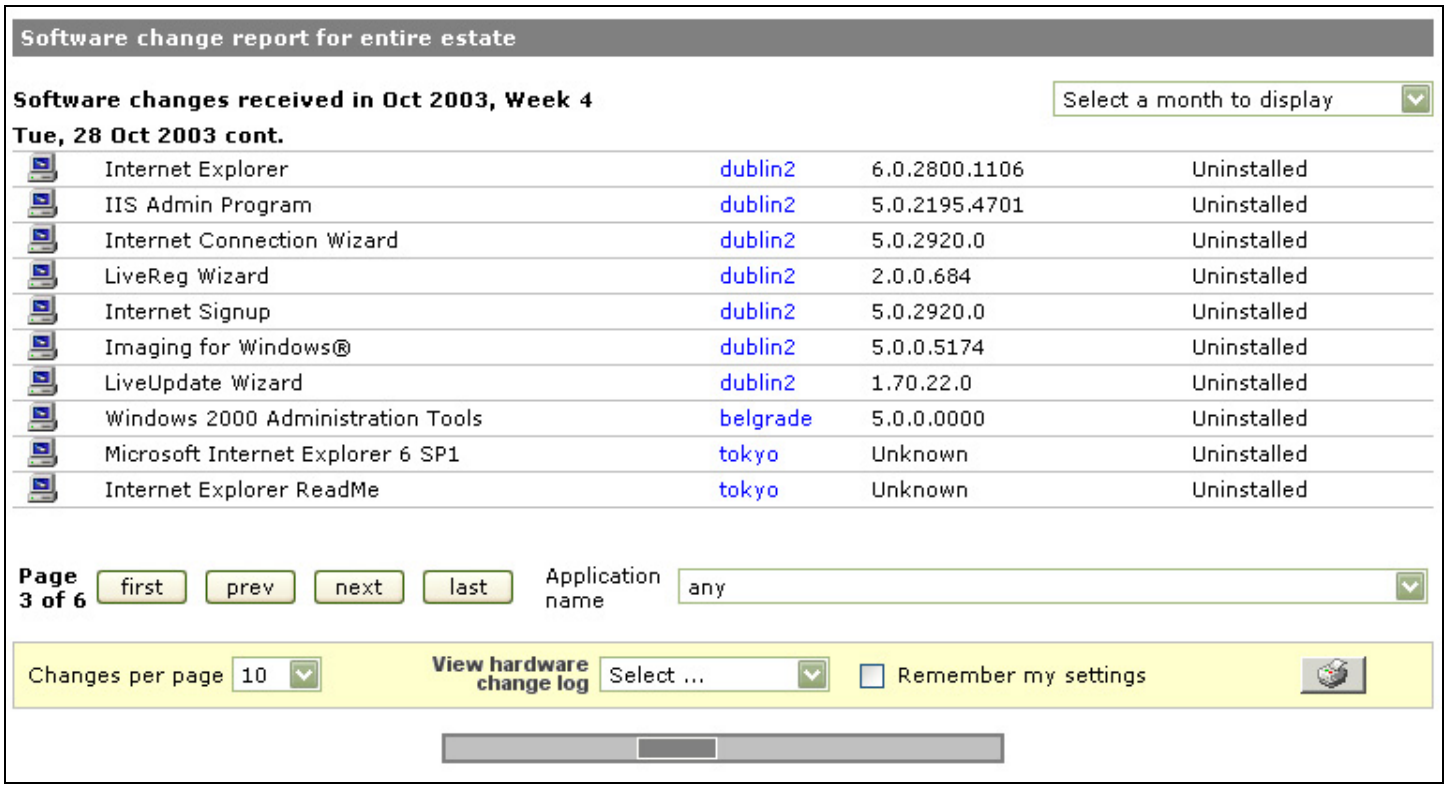

Software change report for entire estate
Software changes received in Oct 2003, Week 4
Select a month to display
Tue, 28 Oct 2003 cont.
Internet Explorer dublin2 6.0.2800.1106 Uninstalled
IIS Admin Program dublin2 5.0.2195.4701 Uninstalled
Internet Connection Wizard dublin2 5.0.2920.0 Uninstalled
LiveReg Wizard dublin2 2.0.0.684 Uninstalled
Internet Signup dublin2 5.0.2920.0 Uninstalled
Imaging for Windows® dublin2 5.0.0.5174 Uninstalled
LiveUpdate Wizard dublin2 1.70.22.0 Uninstalled
Windows 2000 Administration Tools belgrade 5.0.0.0000 Uninstalled
Microsoft Internet Explorer 6 SP1 tokyo Unknown Uninstalled
Internet Explorer ReadMe tokyo Unknown Uninstalled
Page 3 of 6
first
prev
next
last
Application name
any
Changes per page 10
View hardware change log
Select ...
Remember my settings

Fig 3.11 – software change report for all machines for the selected week.

4: The Central Configuration Tool

The Central Configuration Tool is used to control when systemhound detection programs (plugins) are run. You can also input user defined custom fields, which appear in a machine's detailed hardware report. In addition, customisation options for each of the plugins are available.

Introduction

To open the Central Configuration Tool, click on **`Start/Programs/systemhound/Tools/Central Configuration`**.

The Tools menu offers quick access to the other systemhound tools such as the Install Wizard, Export Wizard and Website Maintenance.

There are sections for each Operating System from Windows 95 to Windows 2003.

Section	Description	Default frequency
Application Reporting	software reporting	daily
Custom Computer Details	user-defined custom fields	7 days
System Information	hardware reporting	daily
systemhound Auto Uninstall	can be enabled to uninstall client software	n/a
systemhound data upload	client communication to the server to check for new plugins, deliver new inventory and check for polling interval changes.	hourly

Changing the data collection intervals

This section describes how to use the Central Configuration Tool to change the default data collection intervals for the network. This is the frequency at which each computer communicates with and passes data to the systemhound server (**SHS**). Refer to Appendix A for an overview of this process.

As shown in the table above the standard systemhound installation has a default polling interval for Application Reporting and System Information for each computer of 1 day and a default systemhound data upload interval of 1 hour. The daily data collection interval means that the client signals to the SHS to upload any new data logs of hardware and software once every day. The hourly upload interval means that the client will communicate to the SHS every hour to see if any changes to any collection parameters or polling intervals have taken place. If so, the revised collection parameters/polling intervals will be passed from the SHS to the clients and updated.

It is important that the data upload interval is not too infrequent, as a weekly upload for example will mean that changes to polling intervals etc will not be updated for a week, unless the **Force Resend** option is used.

For each class of data on each operating system on the network, polling intervals can be defined. To change polling intervals the following procedure should be used:

1. Click on the data type within the Operating system in the left hand pane above (e.g. Windows 2000 Application Reporting, see Fig 4.1). Then click on the data description field (e.g. installed Applications) and then click on 'Job 0'.

2. This will then bring up the current polling interval in the Execute Task pane. Modify the polling intervals here. You can choose to execute a task by number of days, hours or minutes. You can also choose not to execute the task on certain days.

3. The new polling interval will take effect at the next data upload session. If for example an interval of 2 hours is specified for "system information" and the upload interval is one hour, then in one hour's time the new polling interval would become effective and two hours after that the hardware inventory information would be collected.

4. All configuration changes must be saved (File/Save) before they will be released to systemhound client machines.

Note: If the Force Resend option is applied, the scheduled times for running a particular plugin are ignored. When the client next communicates with the server, it is told to run the plugin immediately, regardless of the last time it ran. For example, the default schedule for retrieving user defined data is set to 7 days. If you have an urgent need to see updated data, click on Force Resend. When the client next communicates with the server (every hour, by default), it will retrieve user defined data and at the next data upload session an hour later, it sends this data to the server. Therefore, within a maximum of two hours, you can view updated user defined data instead of waiting 7 days.

Note: data collection and upload takes place immediately after first installation, irrespective of the polling intervals. (The exception is using the Install Wizard, where you can choose not to do this). Therefore, you will be able to see a machine's inventory data on the web reports soon after the systemhound client is installed.

Note: if a client machine is not on the network (e.g. laptops, pc's that aren't logged in) at the designated collection time, upload will take place when it is next connected to the network. Data collection will continue to take place at the designated polling intervals; the data log file is automatically deleted when it reaches 500Kb if it has been unable to connect to the server.

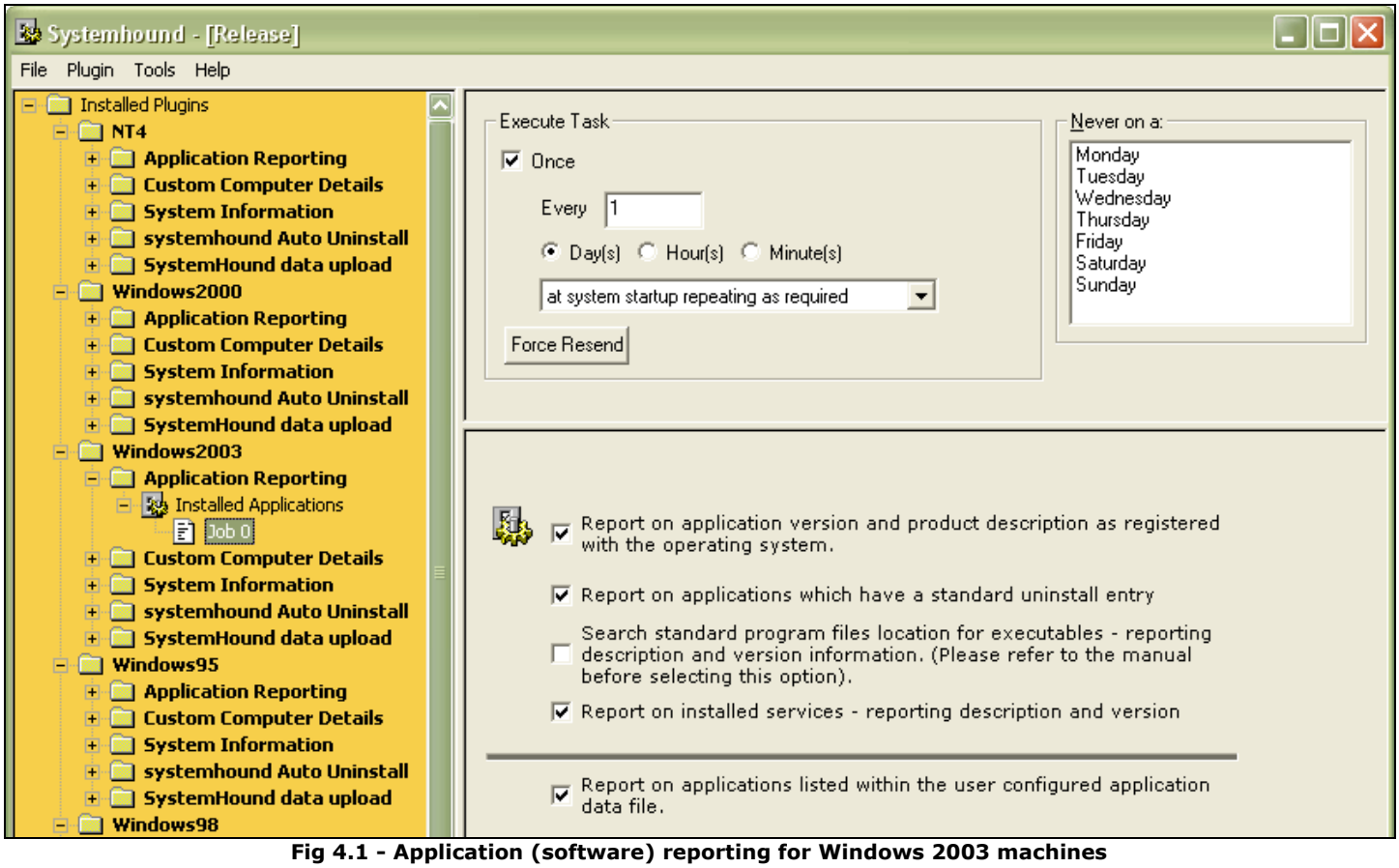


Fig 4.1 - Application (software) reporting for Windows 2003 machines

Setting additional data collection schedules

Occasionally, you may wish to collect the same data at different intervals. For example, you may want a data upload interval of 1 day at the weekend but every hour during the week. Or you may want to carry out a hardware inventory once per day during the week, but every four hours at the weekend.

To do this, a new job (**Job 1**) should be created either via selecting **New Job** from the **Plugin** menu at the top of the screen or right clicking on current job (Job 0) or the data description.

Input the intervals for the additional schedule and then save the changes (**File/Save**).

To delete a schedule, select the Job and either right click and choose Delete Job, or choose this option from the Plugin menu.

Configuring Application Reporting

By default, the application (software) reporting finds software as follows:

Registry - from applications registered within the Operating System, reporting on version and product description
Add/Remove Programs - from applications that have a standard uninstall entry as shown in Add/Remove Programs within Control Panel
Services - from installed services, reporting on version and description.

The final option that is available is to search the Program Files directory for all executables, reporting on version and product description. This option is not turned on by default. To turn this on, check the box for the relevant Operating System, and save the changes.

Note: This is not enabled by default due to the large amount of executables returned from a scan of the Program Files directory, much of it irrelevant. Enabling this will result in larger log files from the client to the server, increasing network traffic and possibly impacting on user machines. It should be used infrequently.

For further information on customizing systemhound software reporting, please see Section 7.

Automatic un-installation of client software

The systemhound client software can be removed automatically from client PC's by enabling it in the Central Configuration. This procedure must be carried out for each type of Operating System in your installation. It schedules the client software to remove itself once it has shipped data to the server.

Select an Operating System type and choose **Systemhound Auto Uninstall**, then right click on **One shot inventory** to define a new job. Check the box in the uninstall plugin section which you will now see. If you wish, schedule a time period for this task to be executed. Save the configuration by choosing **File, Save.** The client software will uninstall itself *after* its next scheduled data collection. This procedure is final, and if you wish to see new inventory data, you will need to re-install the client software.

The systemhound GUID (unique identifier) within the registry is still maintained. If the systemhound client is re-installed on the machine at a later date, it will already have been allocated its identifier. If you wish to remove this key, delete it from the registry at **HKEY_LOCAL_MACHINE\SOFTWARE\SYSTEMHOUND**.

Note: The Auto Uninstall method will uninstall the systemhound client from all clients of a particular Operating System. For more information on deleting individual systemhound clients, please see section 8.

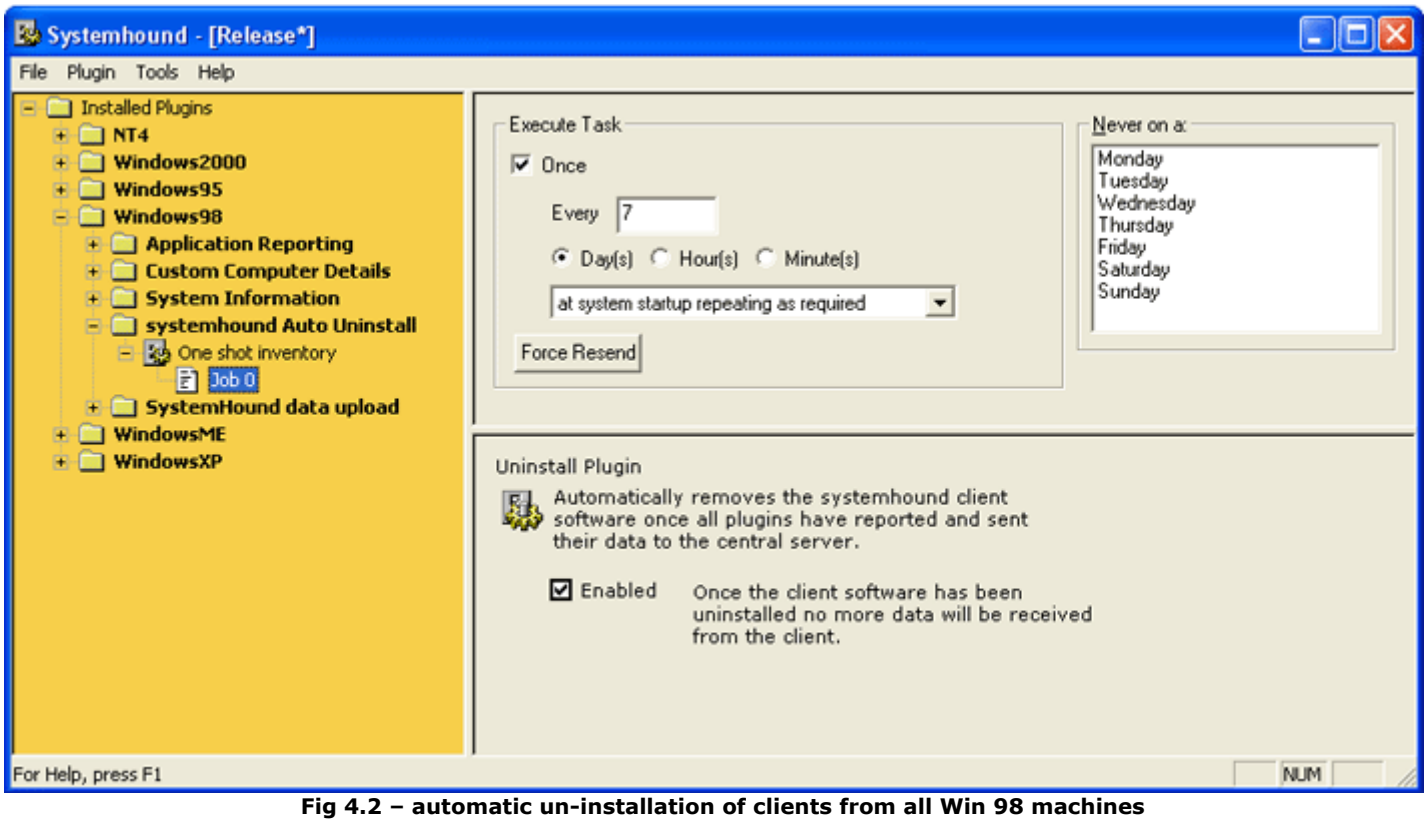


Fig 4.2 – automatic un-installation of clients from all Win 98 machines

User Defined Fields

User defined fields enable you to input your own information into systemhound and view this on the detailed hardware reports. This information could be anything; examples are storing the location or department of the pc, a serial number or asset id or anything that you wish to see in a particular machine's hardware report. An unlimited number of fields can be defined, with the information being derived from a file or from a registry entry on each machine. See Fig 4.3 for examples.

Inputting user defined information from an initialization file

For this example, you can create a file called pcinfo.txt in your WINNT folder on your Windows 2000 computers. It should have the following format, as shown in Fig 4.4. The section headings are required and enable you to structure your user defined information. The headings do not appear on the reports.

1. In the Central Configuration Tool, select the Operating System, Windows 2000 in this case.
2. Right click on Custom Computer Details and choose New Job.
3. In the right hand window, click on **Add**.
4. Select **Initialisation File** (selected by default).
5. Enter the details as shown in Fig 4.5. Environment variables such as `%WINDIR%`, `%PROGRAMFILES%`, `%SYSTEMROOT%` are supported or enter a specific location such as C:\WINNT\pcinfo.txt
6. Click **OK** and repeat these steps for every user-defined entry you want reported.
7. Then save your configuration changes by clicking on **File\Save**.

8. The changes will be sent to client machines at the next upload session, and will take effect at the next scheduled data collection interval. To see the custom information, click on the detailed hardware report for an individual pc.

*Note: To test this immediately, run shrefresh.exe twice in succession. (This exe is in **Program Files\systemhound\utils** on the systemhound server - map a drive to it and run it locally on the machine which has a custom file.)*

Note: The user defined fields support wildcards. For example if it was set to read the INI file C.adp, it would find C1196.adp. It reads from the first match it finds.*

USEFUL ENVIRONMENT VARIABLES (type set into a command prompt for a list of environment variables applicable to your network.)	
%programfiles%	Program Files directory on all local drives
%windir%	The WINNT folder
%systemroot%	The system drive on WinNT, 2000, XP

Custom information for kabul

allocated to	William Gates
department	Accounts
location	London
leasing costs	£200
term	12 months
expires on	01 Sep 03
leased from	NEC Leasing Ltd

Fig 4.3 – an example of user defined fields. This information is viewed in the detailed hardware report for the machine

The **section name**: goes in the 'section' box in Central Configuration.

The **field name**: goes in the 'field' box in Central Configuration.

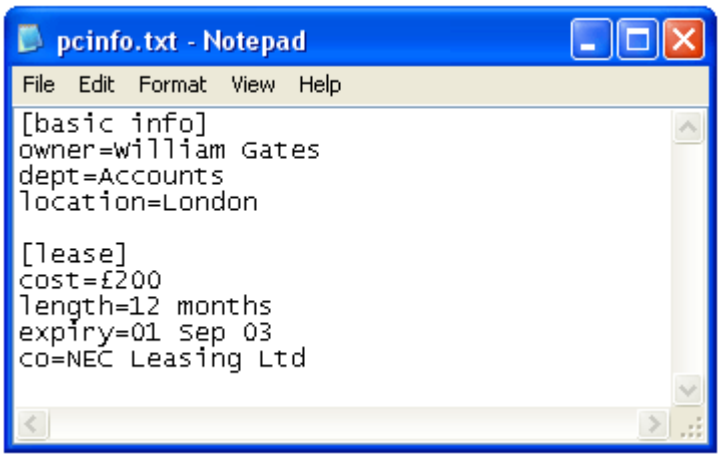


Fig 4.4 – pcinfo.txt

Fig 4.5 – inputting user defined information via an ini file

Inputting user defined information from the registry

This example shows how to configure systemhound to report on user defined information from the registry, in this case whether filenames with an 8.3 format have been disabled or not.

1. In the Central Configuration Tool, select the Operating System, Windows 2000 in this case.
2. Right click on Custom Computer Details and choose New Job.
3. In the right hand window, click on **Add**.
4. Select Registry Entry.
5. The registry entry we want is located at **`HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\FileSystem\NtfsDisable8dot3NameCreation`**. In the **Hive** drop down list, select **`HKLM`** (the hive corresponds to each of the main registry classes) and in the **Key** field, enter **`SYSTEM\CurrentControlSet\Control\FileSystem\`**. In **Field**, enter **`NtfsDisable8dot3NameCreation`**. In the **Reporting Field Name**, enter a description for this custom information.
6. Click **OK**.
7. Repeat these steps for every registry entry you want reported.
8. Then save your configuration changes by clicking on **File->Save**.
9. The changes will be sent to client machines at the next upload session, and will take effect at the next scheduled data collection interval. To see the custom information, click on the detailed hardware report for an individual pc.

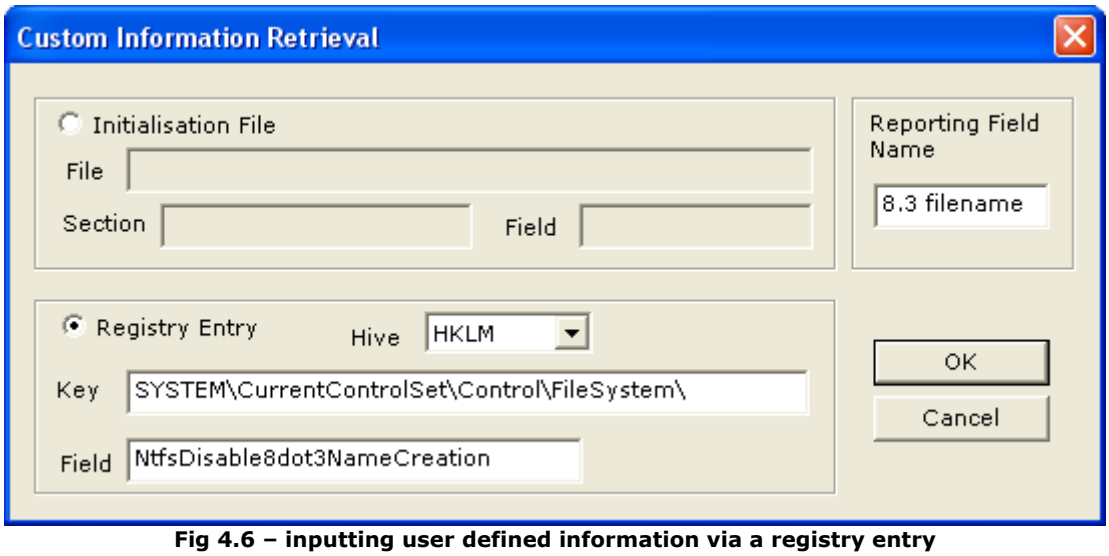


Fig 4.6 – inputting user defined information via a registry entry

The user defined fields can also be edited and deleted. Highlight the entry you want and select **Edit** or **Remove**. All changes must be saved to take effect.

Note: The user defined fields need to be entered for each Operating System present on your network that you want to collect information from. To copy these fields across to other Operating Systems quickly (from Windows 2000 to XP for example), save any changes to the Central Configuration, go to Program Files\systemhound\Release\Windows2000\Plugins and copy the file custinfo2.dat to Program Files\systemhound\Release\WindowsXP\Plugins.

Note: By default the polling interval for Custom Information is set run every 7 days but you can change this to whatever suits you. If the information you are retrieving does not change very often, you may wish to leave it at 7 days.

5: The Export Wizard

Use the Export Wizard to export hardware and software data in csv and mdb file format, which can be used for analysis in spreadsheet packages like Excel or database packages like Access. This function must be carried out on the systemhound server.

Exporting data

1. Open the wizard from `Start/Programs/systemhound/Tools/Export Wizard`. Your licensing details will be shown on the first screen (figure 5.1).

systemhound : Introduction
systemhound™
systemhound export tool V4.0.0.1
Welcome to the export wizard. This tool gives you the ability to export systemhound audit details to CSV (comma separated values) files. You can then import these files into a spreadsheet package for detailed analysis and reporting.
More information regarding the format of the CSV file generated can be obtained from the systemhound website.
Site Code : A1A785AA9C50AEFD21E400
Licensed To : SI UK Ltd
License Detail : 101 of 5000 used
< Back
Next >
Cancel

Fig 5.1: The Export Wizard

2. Click **Next.** Choose an **Export Type** and **Export Location** as shown in figure 5.2. A default location is already shown. To change this, either type in a new location or browse to a new location by choosing the browse button ....

   If you wish, you can also change the default filenames for hardware and software. The website location is given as a reference.

   You can also choose an alternative **Field Delimiter**; by default it will use the delimiter as defined in the computer's regional settings. This delimiter is defined in the registry key:
   `HKEY_CURRENT_USER\Control Panel\International\sList`

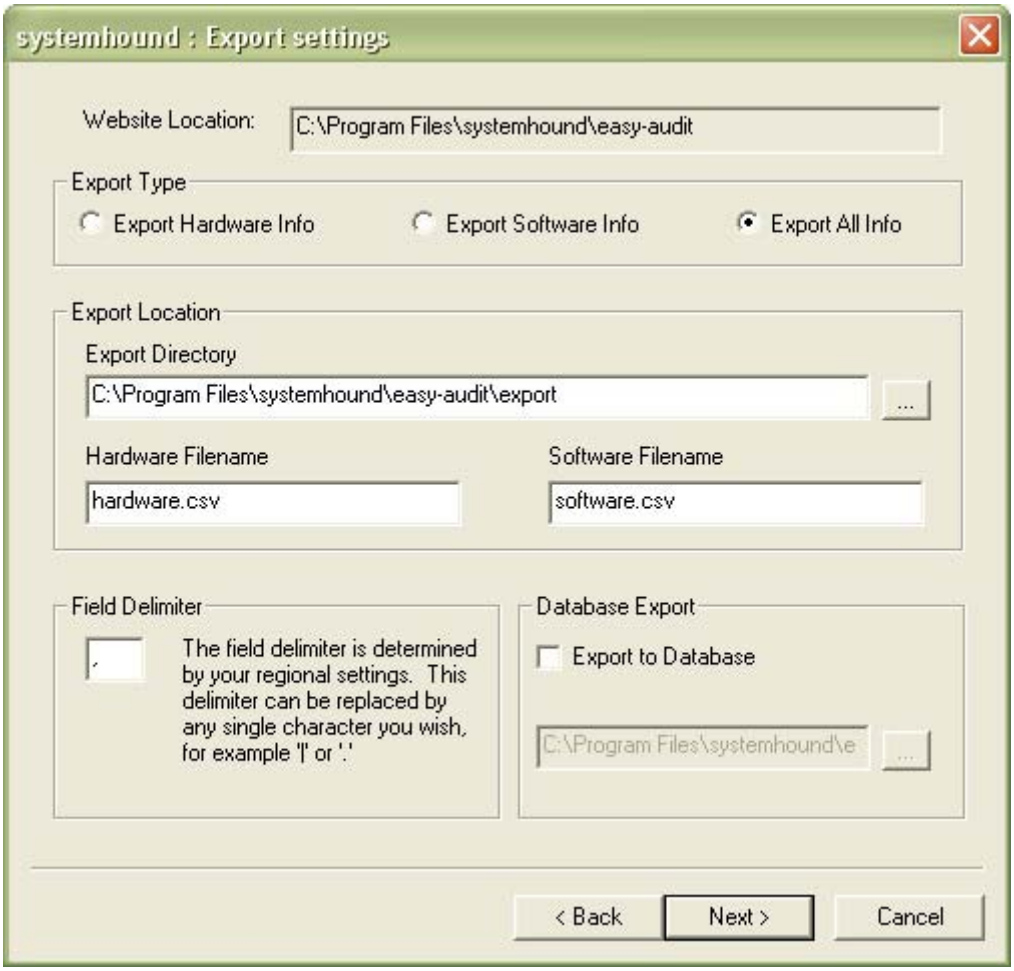


Fig 5.2

To export the data to Access, check the **Export to Database** box.

The Access database that is produced has the following tables: GUIDS, HARDWARE, HARDWARE_DRIVES, HARDWARE_NETWORK, HARDWARE_PERIPHERALS, SOFTWARE and CUSTOM. The CUSTOM table is only produced if there is custom (user-defined) data in the database. Hardware information is split into four separate tables due to the restriction Access places on total table width.

All tables have a column called 'UNIQUE_MACHINE_ID' which is the primary key for each table. This is the column that is used to join the tables.

It is not possible to export to Access without also creating the .csv file.

3. Click **Next**, and the next dialog is as shown in Fig 5.3**.** By default, all software items are exported but if you prefer, you can choose not to export **hidden software** or software discovered from **Add/Remove Programs**, **Services** or the **registry**.

4. You also have the option to split the CSV files created. This applies to the software export only, as to import it into a spreadsheet application like Excel, it must have less than 64,000 lines. This can be exceeded if there are a large number of machines (typically in excess of 1000).

   If you choose not to split the CSV file, the export wizard will create one hardware and one software file. If you do check the box, split files will only be created if there are more than 64000 lines of applications.

   If you intend to use the exported CSV data in a database like Oracle or SQL, you will probably find it is easier to import one file only, therefore you should not split the CSV file. You should also have one

file only if you wish to make use of the **Software CSV Report Example.vbs** file included within systemhound for creating your own reports (see Appendix B).

You can also choose to filter the software so that only applications which have a particular string in them are exported. For example, you may only want to export software applications that contain the string **Microsoft** in them. Check the box which says **Filter exported software applications**, and enter your text in the field. Wildcards are not supported (e.g. you cannot enter Micro*). The filter is case sensitive.

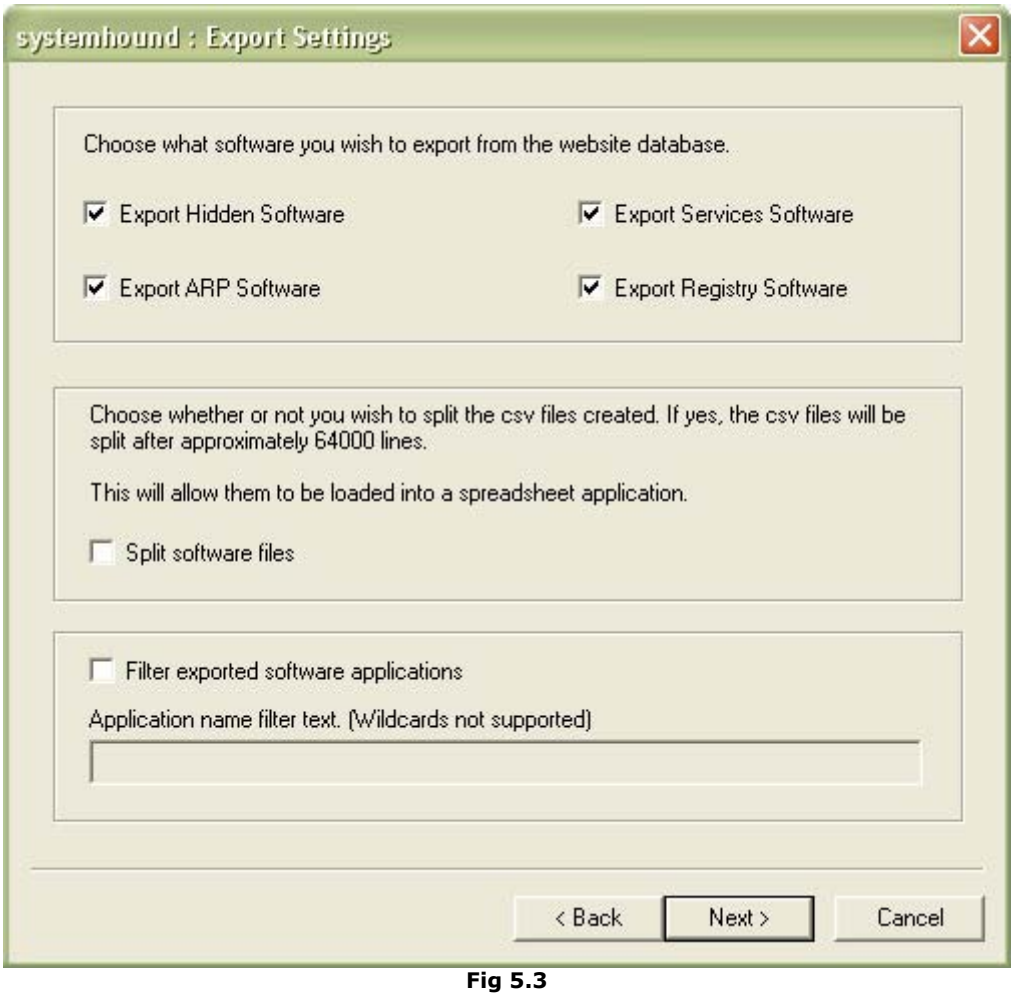

systemhound : Export Settings
Choose what software you wish to export from the website database.
Export Hidden Software
Export Services Software
Export ARP Software
Export Registry Software
Choose whether or not you wish to split the csv files created. If yes, the csv files will be split after approximately 64000 lines.
This will allow them to be loaded into a spreadsheet application.
Split software files
Filter exported software applications
Application name filter text. (Wildcards not supported)
< Back
Next >
Cancel

Fig 5.3

5. Now click **Next**. The next screen gives the export status and percentage completed. Click **Export** to start the process.

   The data export process will commence (Fig 5.4). The time this process takes varies – see the table below for more details. Once the data has exported, click Finish to close the dialog. You can also use the command line interface as an alternative to the Export wizard (see 'Exporting data using the command line', in this section).

	No of clients	**CSV only**	**CSV + MDB**
Estimated export times (using a PIII 600 MHz, 256Mb systemhound server)	500	1 minute	4 minutes
	1000	2 minutes	8 minutes
	4000	12 minutes	33 minutes

A log file of the export process is created in the `C:\ProgramFiles\systemhound\logs` directory called **CsvExport.log**. A successful export will indicate 'Finished CSV Export of Systemhound data'

at the end of the log. Logfiles are archived and a maximum of 5 log files will be kept and then the first will be overwritten.

Note: While the export process is in progress (Fig 5.4), the systemhound website is not updated

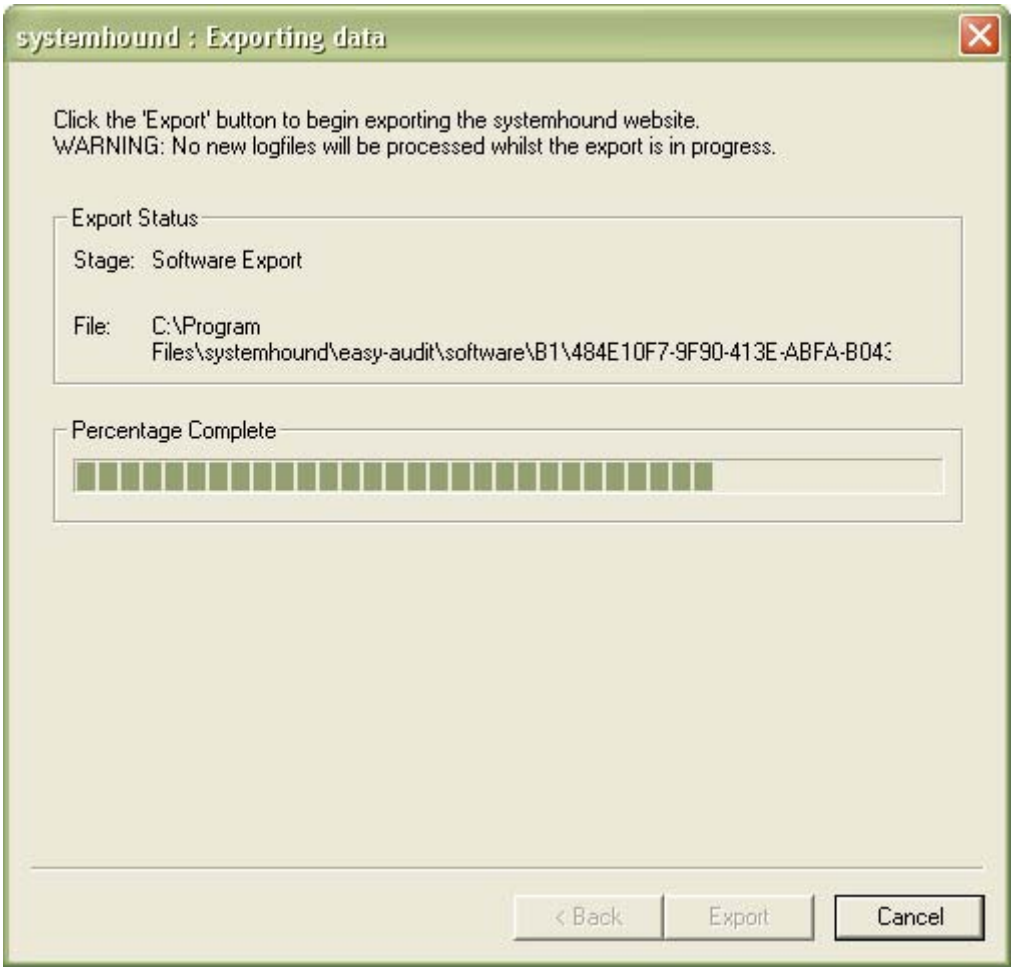

systemhound : Exporting data
Click the 'Export' button to begin exporting the systemhound website.
WARNING: No new logfiles will be processed whilst the export is in progress.
Export Status
Stage: Software Export
File: C:\Program Files\systemhound\easy-audit\software\B1\484E10F7-9F90-413E-ABFA-B043
Percentage Complete
< Back
Export
Cancel

Fig 5.4

Exporting data using the command line

Command Line Interface options for exporting data to CSV	
This is an alternative method of using the Export wizard. The following switches can be used in a DOS prompt window, opened in `C:\Program Files\systemhound\utils`.	
-s	Runs in silent mode – always needed to run without the GUI
-hwfile [filename]	Exports hardware, default hardware.csv unless filename specified
-swfile [filename]	Exports software, default software.csv unless filename specified
-d [directory name]	Directory name (default: C:\Program Files\systemhound\easy-audit\export\)
-split	Splits the software.csv files after 64,000 lines
-filter [string]	Filters the software by a search string
-delimiter	Specifies a delimiter other than the default
-database	Exports in .mdb format; requires –hwfile and –swfile as well
-no_arp	Will not export software discovered via Add/Remove Programs

-no_hidden	Will not export software hidden from the report
-no_reg	Will not export software discovered from the registry or a disk scan
-no_services	Will not export services

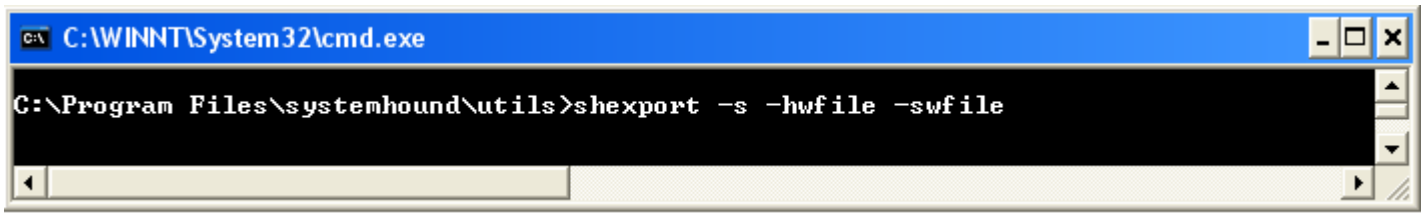


Fig 5.5: exporting hardware and software to default file names

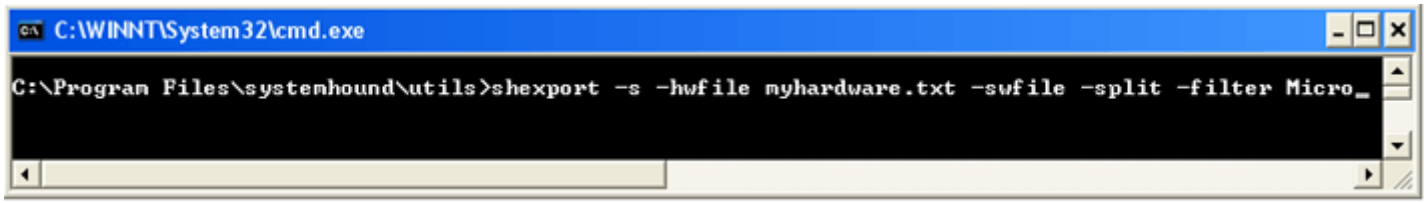


Fig 5.6: exporting hardware with a non-default file name and using the split and filter options

Note: For examples and tips on how to use the CSV data to create reports, please see Appendix B.

6: The Website Maintenance Tool

The Website Maintenance Wizard offers several options to control your systemhound web reports by allowing you to delete user machines from the database, hide software from the reports, control licence numbers for applications and switch between two systemhound 'skins' – classic and corporate.

Go to `Start/Programs/systemhound/Tools/Website Maintenance` to access the wizard. As shown in Fig 6.1, the sitebuilder service needs to be stopped before you can use the Website Maintenance Tool. Click OK on the dialog to let systemhound do this for you, then click OK again to start Website Maintenance. You can switch the Control Panel that appears at the top to the left or right of the screen by clicking on the ☞ button. To close the tool, click Quit (you will be prompted to re-start the sitebuilder service).

systemhound website maintenance
systemhound™
Website maintenance utility version
Copyright (c) 2003 Software Innovations UK Ltd.
CAUTION :
This utility can permanently remove machines or hide applications from the systemhound easy audit web site if instructed to do so. Care should be taken in its use.
Please wait ...
systemhound information
The systemhound Site Builder process is currently running; you may not run the Web Maintenance program while this is the case.
Click 'OK' to stop the 'systemhound Site Builder' service.
OK
Cancel

Fig 6.1.

Deleting machines

1. The Website Maintenance Tool opens on the Hardware page (see Fig 6.2). To delete machines, check the box for the relevant machine(s) and press **Commit**. If you move to the Software page without committing, you will lose your changes.

2. On the next screen, click OK to delete the machines (or Cancel to return to the Hardware page). A progress bar now appears as shown in Fig 6.3 indicating the deletion progress.

3. To search for a particular machine, use the Search box at the bottom of the page.

4. To delete machines which have not updated recently, sort the page on the **Updated** column.

Note: Machine deletion can take between 7 – 12 seconds per pc depending on the speed of the server, and the amount of software present on the selected machines.

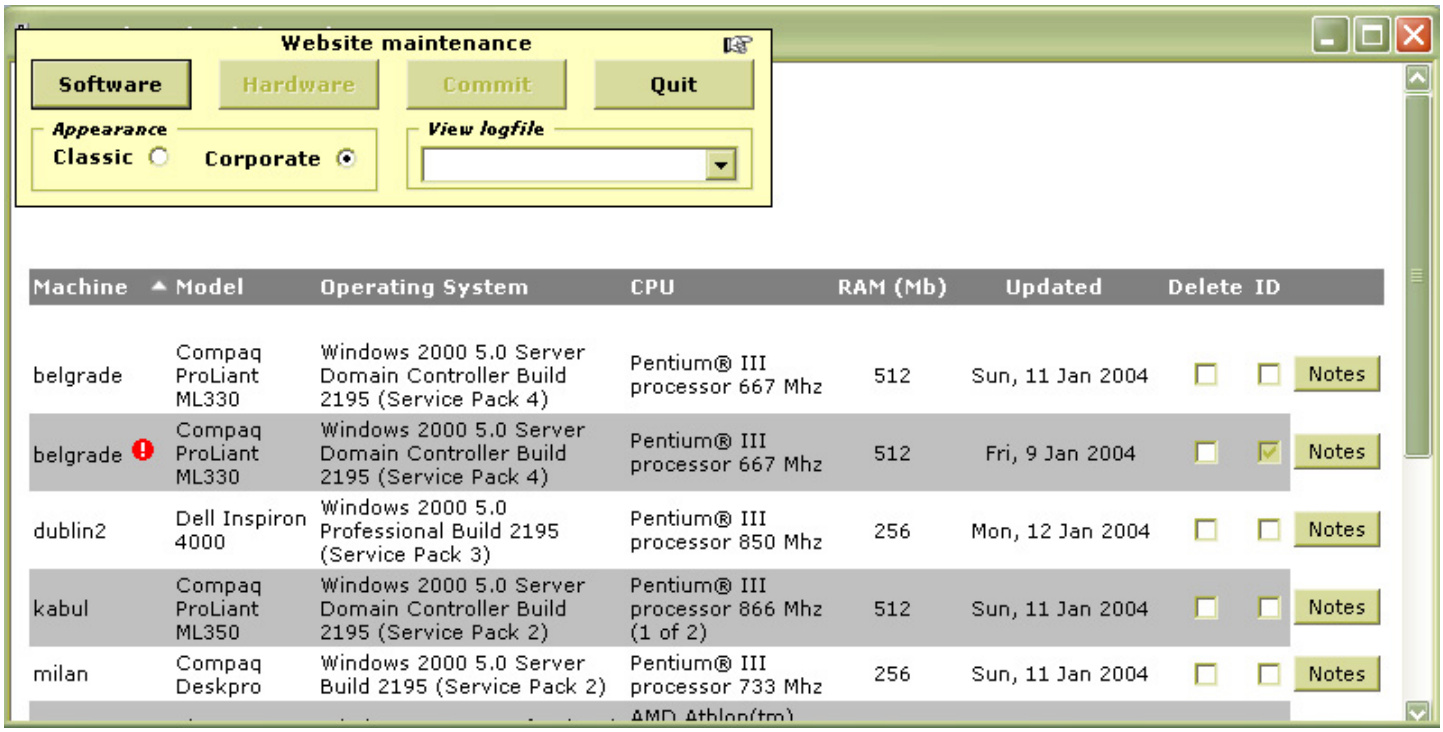


Fig 6.2.

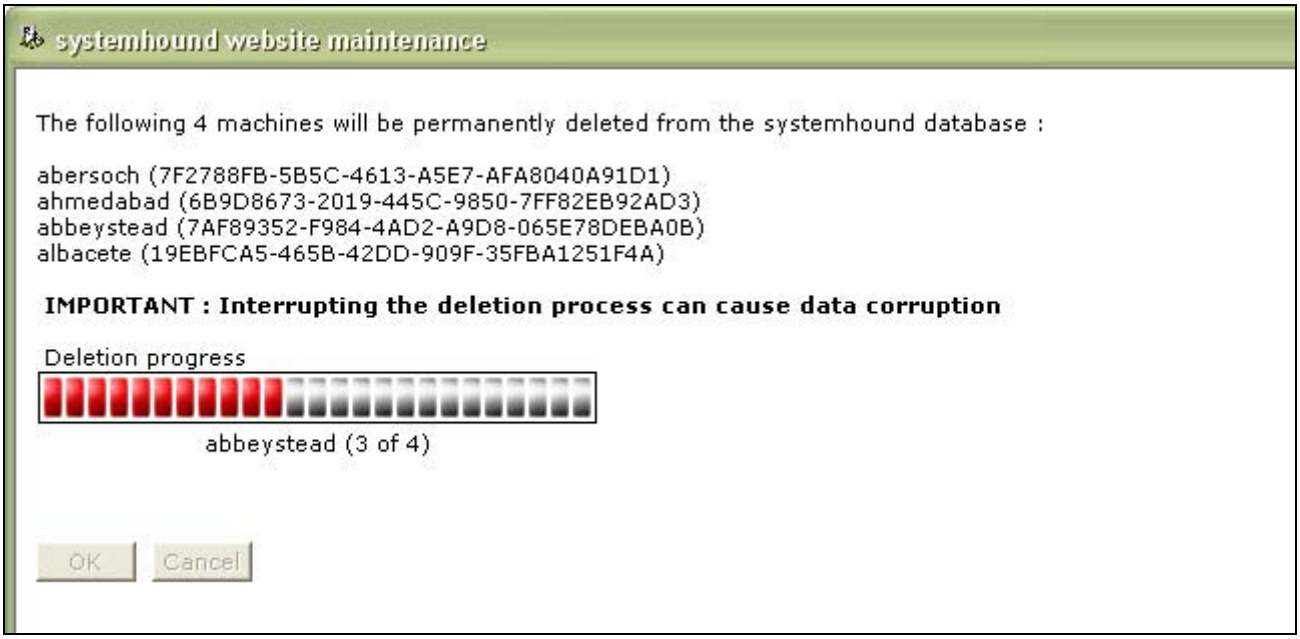


Fig 6.3.

Note: Using this feature does not delete systemhound client software from the client machine. In most cases, a machine will only be deleted from the database if it is being taken out of service or being reformatted, etc. However, if the machine is still 'active' then it will continue to report to the systemhound server at its next scheduled scan.

Deleting duplicate systemhound ID's

This feature is used to prevent client machines from using the same systemhound ID, a situation that can occur if you have installed the client software using ghosted images without following the proper procedure as outlined on page 17.

If more than one machine has the same ID, they will keep overwriting each other in the database. The result is confusion when you view that machine's information as it will keep changing, and there will be large numbers of changes showing on the hardware and software change reports. Machines with duplicate ID's also cause the systemhound easy-audit sitebuilder service to take up more CPU processing time.

To prevent this, you can force machines that have the same ID to obtain a different one automatically.

1. Identify whether you have machines with possible duplicate ID's (the ID of each machine is listed in the detailed hardware report for that machine). Symptoms can be the Asset ID of the machine changing frequently. The hardware change report for the machine will have a history of such changes.

2. Once you have identified machines with the same ID, open up the Website Maintenance Tool and check the box in the ID column for those machines (Fig 6.2 - You can also hover your mouse over the ID column header for an explanation of this feature).

3. Click Commit, to receive a confirmation screen as shown in Fig 6.4, and click OK. These machines will then be scheduled to receive new ID's and will appear on the hardware report with this symbol ❗. Hover your mouse over it to see an info box that explains that the machine will receive a new ID.

4. The final stage is to delete the machines that have been highlighted with ❗ by clicking on the checkbox in the Delete column. This can either be done immediately following step 3 or after the machine has reported with a new ID.

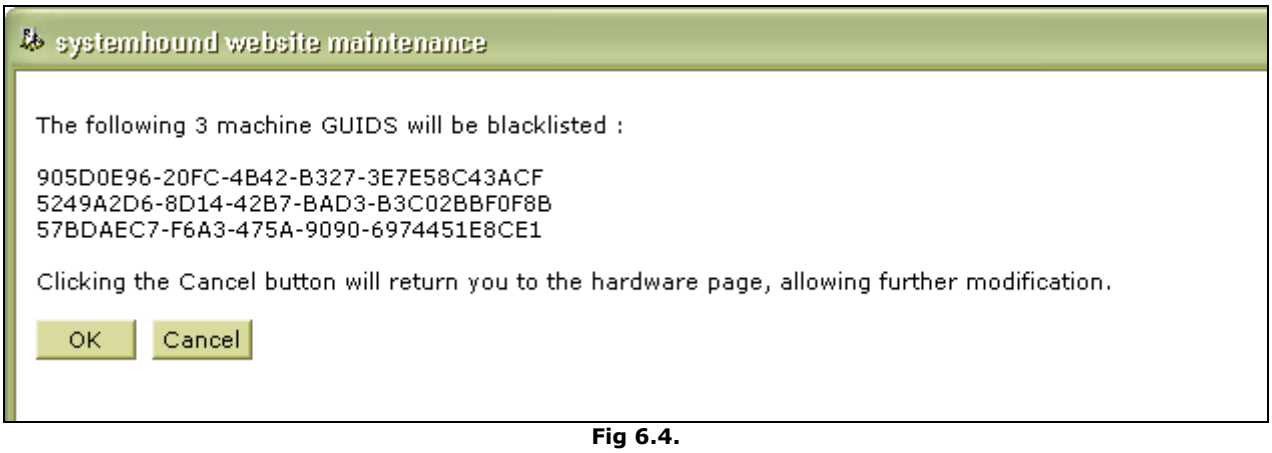


Fig 6.4.

Adding Notes

1. You can add free-form notes for each machine by clicking on the Notes button for a machine on the Hardware page.

2. Enter Notes into the dialog box that pops up (Fig 6.5).

3. Click OK, and then OK again to close it. Your notes will now appear on the systemhound web reports in the Hardware Details page for that machine (see page 26 for an example).

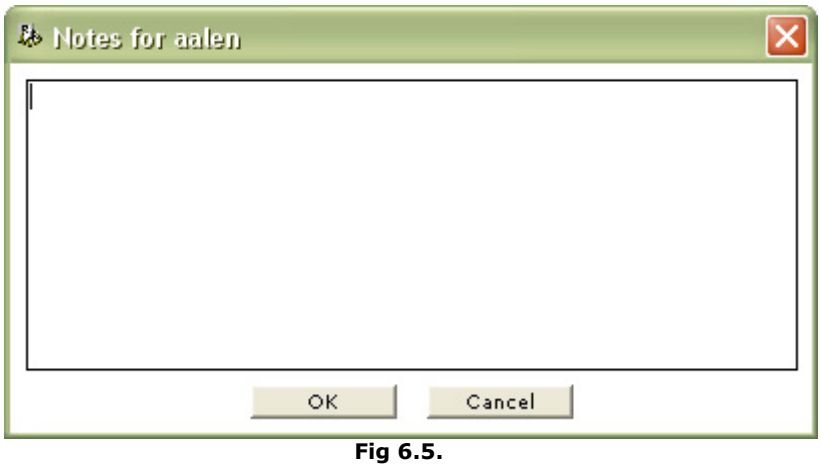


Fig 6.5.

Hiding software and adding licences owned

1. Click on the **Software** button on the Website Maintenance Tool (Fig 6.6) to go to the Software page, where you can hide software from the reports and enter licences you own.

2. To hide software, check the box next to the software you wish to hide. You can also hide all the software on the page by checking the Hide box at the top.

3. To add licences, enter the licence numbers into the input field for the relevant application.

4. Once you have made your selection, press Commit. If you move to the Software page without committing, you will lose your changes.

5. The next screen as shown in Fig 6.7 displays the applications you have chosen to hide and/or enter licence numbers for. Click OK to enter this information into the web reports. Once this is done, you will be returned to the Software page.

6. The software is hidden from the master software report. It is still present on the individual machine software report. To access this, click on the machine's software button that is found at the bottom of the machine's detailed hardware report.

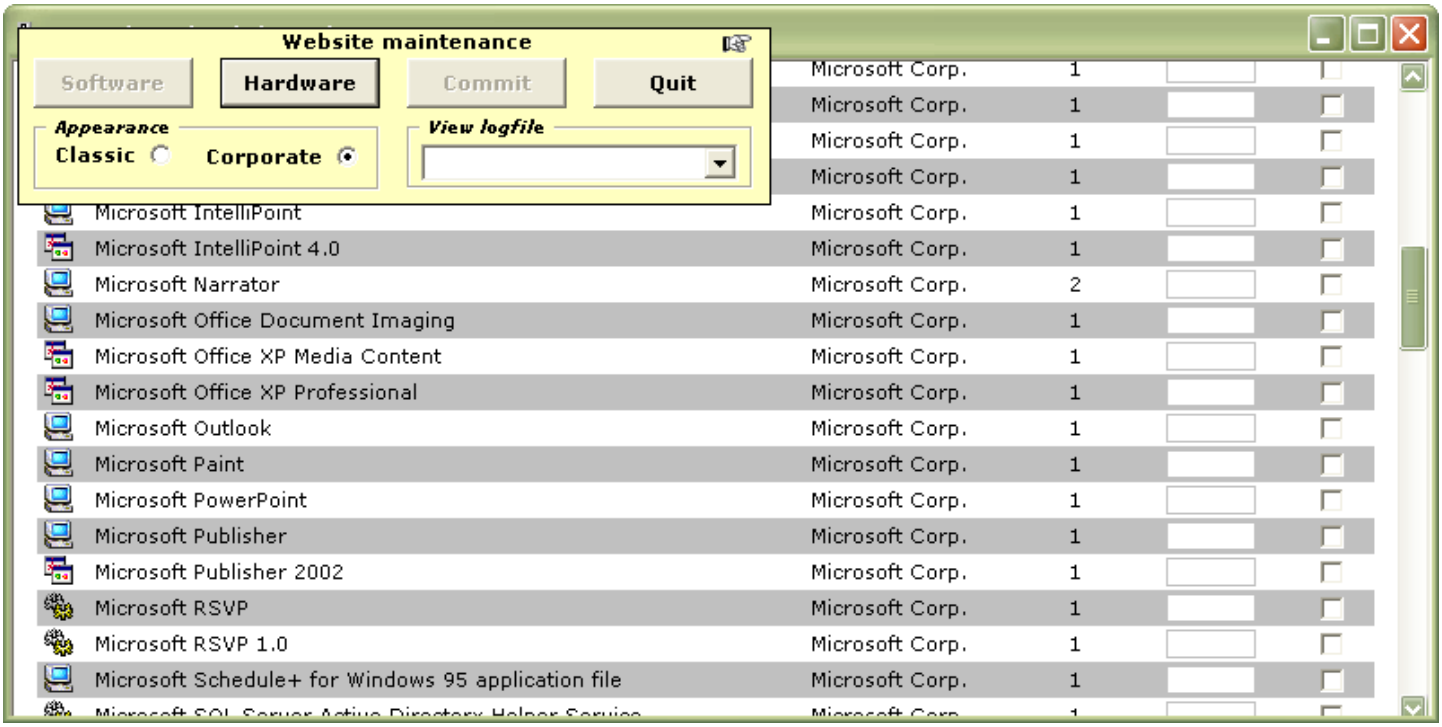


Fig 6.6.

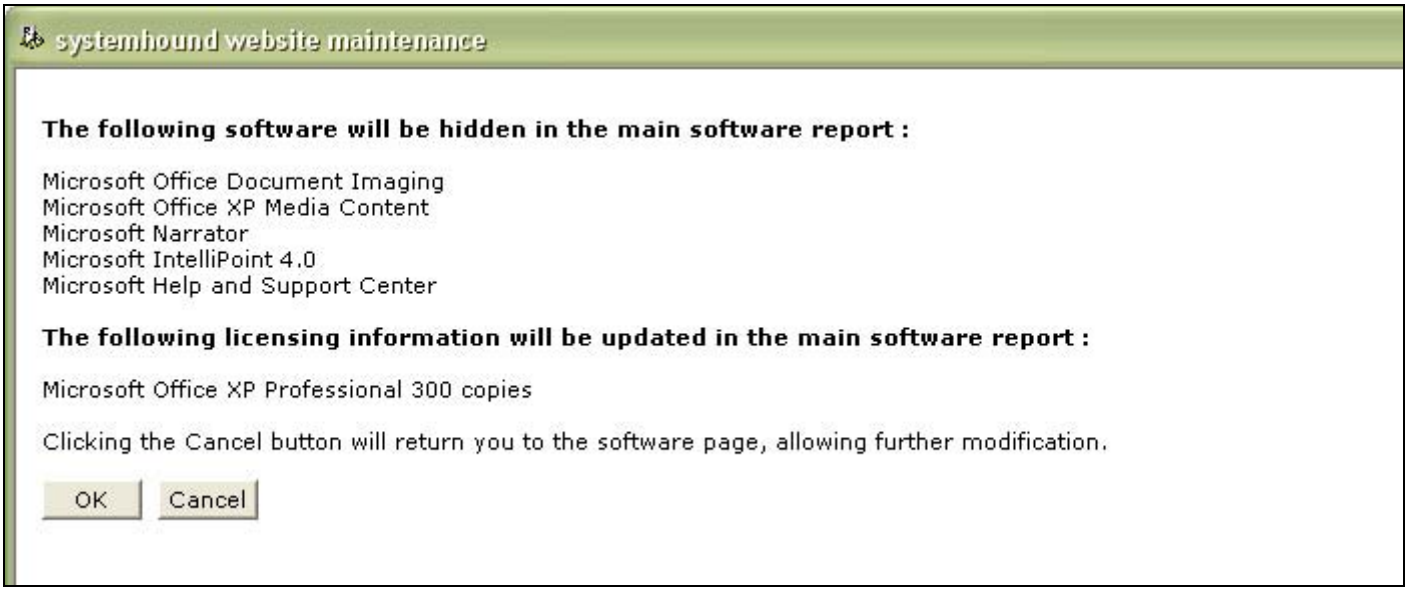

systemhound website maintenance
The following software will be hidden in the main software report :
Microsoft Office Document Imaging
Microsoft Office XP Media Content
Microsoft Narrator
Microsoft IntelliPoint 4.0
Microsoft Help and Support Center
The following licensing information will be updated in the main software report :
Microsoft Office XP Professional 300 copies
Clicking the Cancel button will return you to the software page, allowing further modification.
OK
Cancel

Fig 6.7

Changing the systemhound look

1. To change the look and feel of systemhound, choose the Classic or Corporate option from the Website Maintenance Tool's control menu.

2. Now view your changes by going to **`Start/Programs/systemhound/Tools/Web Reporting`**.

7: The Custom Software Tool and customizing your software detection

This section explains the targeted detection methods that systemhound uses to discover software, to ensure you have a complete and accurate picture of your software inventory. It also details a number of options to further customise the software reporting if you wish to discover additional software that is not being found by the default methods or report on additional product details.

- Software detection within systemhound is a targeted process that aims to have minimal impact on the user machine. By default, software is discovered from the **Registry, Add/Remove Programs** and **Services** (see Configuring Application Reporting in Section 4 for further details). Additional options are:

  - **Program Files scanning**
  - **Full hard drive scan on individual machines**
  - **Custom Software Tool**

- Software dictionaries or other forms of third-party software definitions are not used by systemhound. *With systemhound, you do not have to worry about updating any software definitions!* If it's present, the software will be discovered and your inventory is always kept up to date.

- However, you may wish to further customise the software detection – you may have software that is not being discovered from the default locations or you may want to report on additional product details. There are a number of options available towards this end, such as enabling a full scan of the Program Files directory or running a full hard drive scan.

- The option to do a full hard drive scan should be used as a last resort, as it returns a very large amount of software data, often making an audit unmanageable for the end-user. The full hard drive scan has to be run manually on user machines and cannot be enabled from the Central Configuration Tool – hence it is not possible to carry this out automatically on all user machines.

- The Custom Software Tool provides a means of easily incorporating software data returned from a full hard drive scan. It can also be used to configure systemhound manually to add software that is not being picked up automatically, or to report on additional product details.

Note: Unlike some other commercially available auditing products, Hard Drive scanning is not turned on by default because of the detrimental effect that a full hard drive scan can have on the client machine. The targeted detection methods that systemhound uses are a more effective long-term auditing solution for your environment.

Program Files scanning

A scan of the Program Files directory can be enabled to let systemhound report on all executables found within this directory. As a large number of software executables are returned from this method, it is not recommended that this option be turned on permanently, as the inventory scan will take longer on user machines and the software report will grow very large, making an audit difficult.

The software discovered from a Program Files scan is visible on the software reports as normal. Program Files scanning is enabled from the Central Configuration Tool and can be carried out on every user machine or selected Operating Systems, as desired. See Configuring Application Reporting in Section 4 for more details.

Using the Custom Software Tool

The Custom Software Tool (Fig 7.1) provides an easy way to manage the large amount of software returned from a full hard drive scan. Unlike software discovered from a Program Files scan, all of which is reported to systemhound, software returned from a hard drive scan needs to be added to systemhound's software detection programs first. The customized changes are then distributed to all client machines.

The Custom Software Tool also enables you to add software and additional product details manually. For example, systemhound detects the installed version of 'Norton Antivirus virus definitions' version via a custom entry within the file 'avplugin.db' (see below). The 'Norton Antivirus virus definitions' version is not software, strictly speaking, but is very useful information as it enables you to keep track of current virus definitions on all machines in your enterprise. Any custom software detection is reported both in the software estate summary as well as individual software reports, just like standard software.

It is also possible to add any file that you may wish to see in the reports and systemhound will discover it if present at the specified location.

What is avcustomer.db?

Any customizations that you make to the software configuration by using the Custom Software Tool are retained in this file and distributed to systemhound clients. It is not necessary to edit this file manually. This file is present in `Program Files\systemhound\Release\Operating System\Plugins` on the systemhound server, one file per Operating System. This file should be backed up before upgrading to newer versions of systemhound, and then restored after the upgrade.

What is avplugin.db?

This is a pre-defined list of software that has been known to be exist outside the default locations that systemhound identifies software from. It contains older software and additional product details that you may find useful to have on the reports; if present on your machines, systemhound will report them. The file will be installed by default in the `Program Files\systemhound\Release\Operating System\Plugins` directory when you install systemhound, and it is recommended not to edit it. It gets updated with new releases of systemhound.

Scanning the Hard Drive

Shscan.exe, found in `Program Files\systemhound\utils\shscan.exe`, does a complete scan of the machine and generates a list of systemhound compatible section definitions for all **software executables** found on local drives on the machine. No other file types are found.

To run shscan.exe, which must be run on the local machine, map a drive to the systemhound server and open up a command prompt in the `Program Files\systemhound\utils` folder and type in:

```
shscan.exe [filename.txt]
```

You can use any filename, but it must be a .txt file. Press Enter. The scan returns to the command prompt when completed. See Fig 7.2. Carry out a full hard drive scan on more machines if you wish, using different filenames. Once this is done, you need to import the files into The Custom Software Tool.

Note: The full hard drive scan can take several minutes depending on the amount of software present on the user machine.

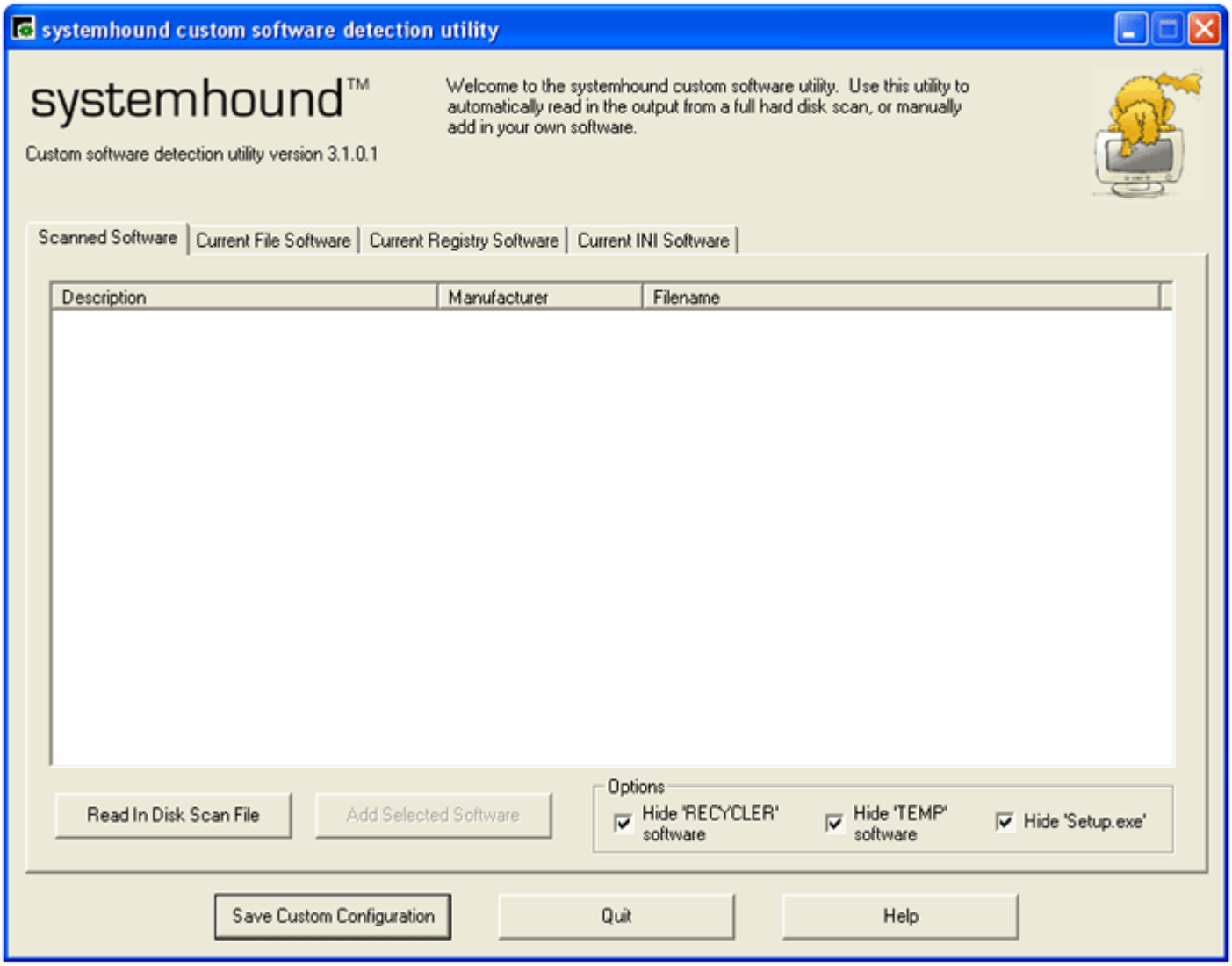


Fig 7.1 – Custom Software Tool

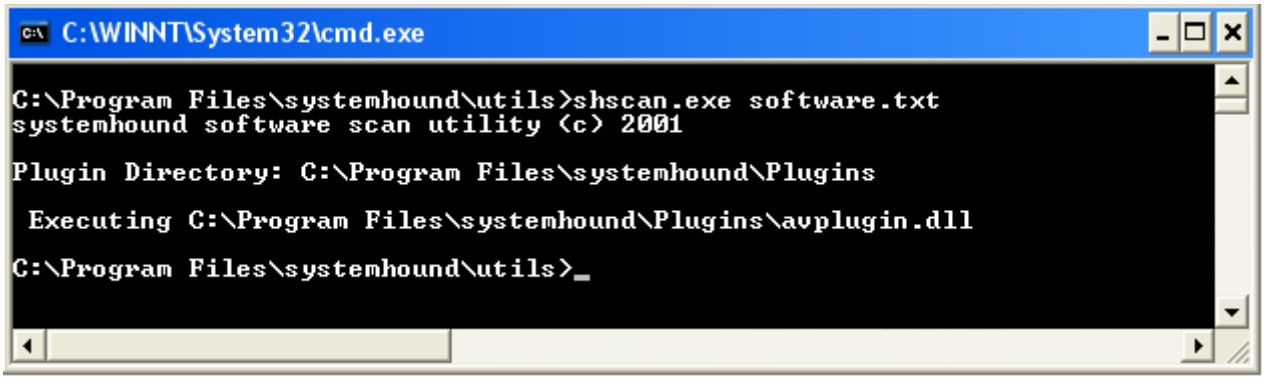


Fig 7.2 – using shscan.exe

Adding Software from a Hard Drive Scan

1. Open the Custom Software Tool from **`Start/Programs/systemhound/Tools/Custom Software`** on the systemhound server.

2. Click on the **Read In Disk Scan File** button, navigate to your file and click Open. This imports the data into the **Scanned Software** dialog. As the full hard drive scan will also discover software that is already being reported by systemhound using the default methods, the Custom Software Tool automatically detects these and does not display them. By default, software found in the *Recycle Bin*, in *Temp* folders or called *setup.exe* will also not be shown. You can uncheck these three options

if you really want to see software found here, but it is recommended you leave these options selected.

3. You now need to select the software, as shown in Fig 7.3. The software is displayed sorted by manufacturer, and the filename is shown using environment variables where possible, e.g. `%ProgramFiles%, %windir%, %localdrive%`, etc. Use the Ctrl + Shift keys to multi-select items. Once you have chosen the software you wish to add, click on **Add Selected Software**. This adds the software into the **Current File Software** Tab, removing it from the Scanned Software list. Click on the Current File Software tab to see your list of customized software (Fig 7.4); also displayed will be any existing custom software.

4. The **Add Software Manually** button allows you to add in your own software manually, or add in a file that you wish systemhound to report, if present on user machines. See below.

5. Now click on **Save Custom Configuration** to add the software to the list within avcustomer.db (see above).

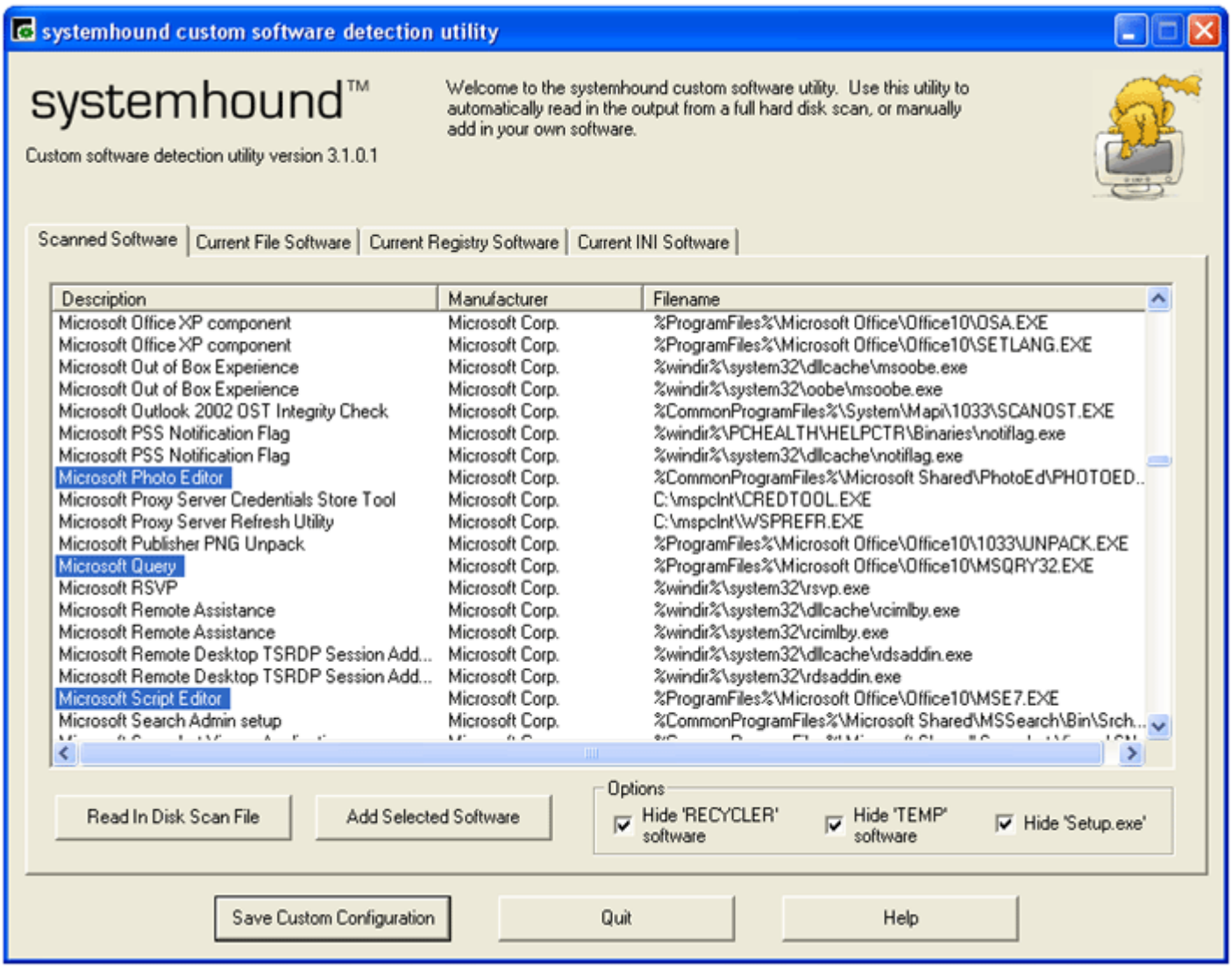


Fig 7.3 – selecting software from the output of a hard drive scan

USEFUL ENVIRONMENT VARIABLES (type set into a command prompt for a list of environment variables applicable to your network.)	
%programfiles% %windir% %localdrive%	Program Files directory on all local drives WINNT All local drives

Note: Click on the Help button at any time for help on using the Custom Software Tool.

Adding Software Manually

The Custom Software Tool provides the ability for you to add software manually, instead of or in addition to running a hard drive scan. For example, you may have certain older software that you find is not being reported by systemhound's default methods, and is not retrieved by running a hard drive scan as it is not an executable. You will need to work out whether the application has its definition in the registry, or in an INI file or can simply be defined using its filename. For example, Microsoft Visual Basic 3 is defined in a file called vb.exe and can be easily added in using its description, as shown in Fig 7.5.

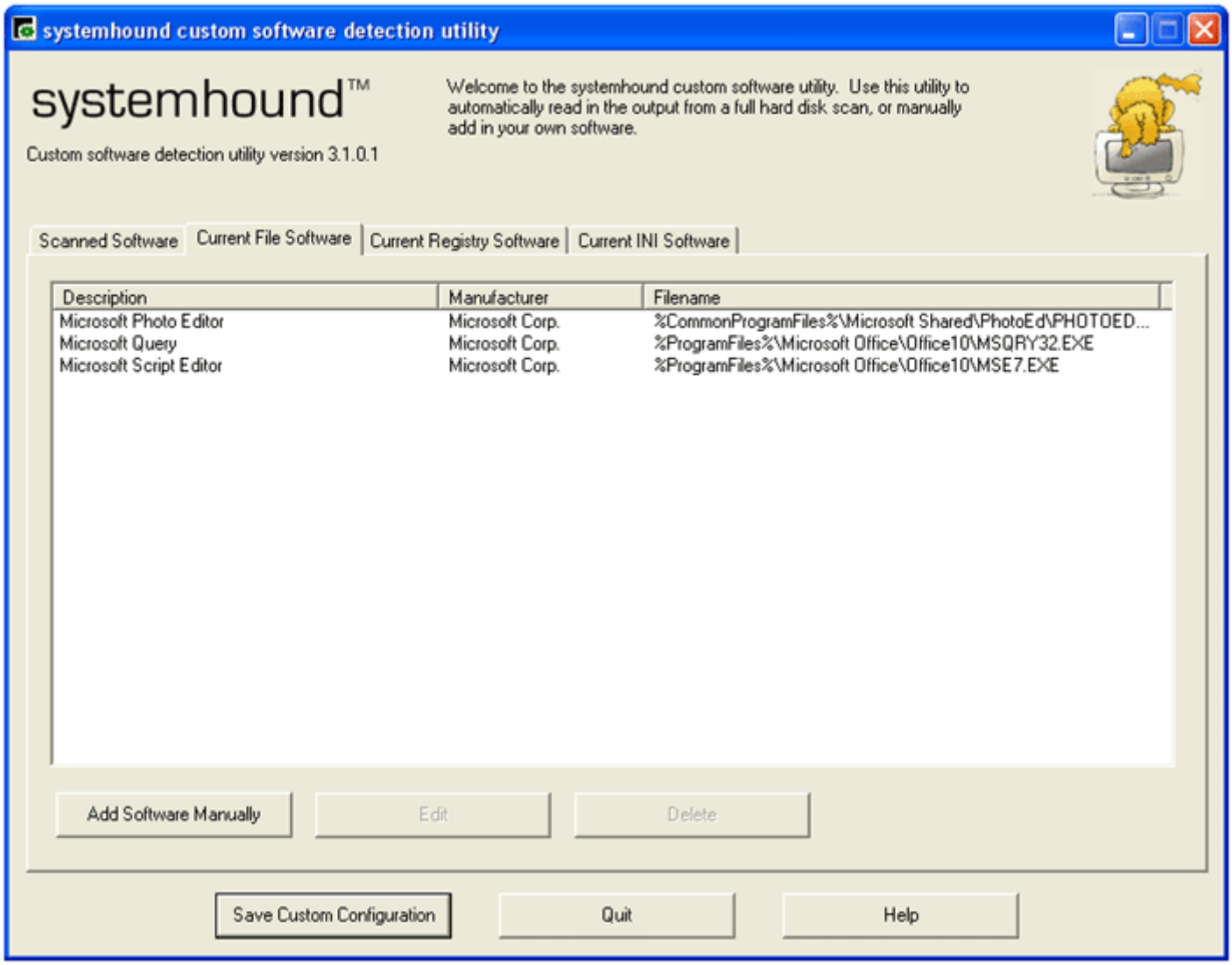


Fig 7.4 – the Current File Software tab displays customized software added using filenames or from hard drive scans

Using a Filename

1. Click on the **Current File Software** (Fig 7.4) tab and then click on **Add Software Manually**. Enter the description, manufacturer and filename fields, as shown in Fig 7.5. Click **Add** and continue manually adding more software. Click **Done** when finished.
2. Once you have finished your customizations, save your changes by clicking **Save Custom Configuration**. An additional use of this facility is to configure systemhound to report on any file, if present at the specified location.

Using a registry entry

1. This feature allows you to add software manually as defined from the registry or to add additional product details that you wish systemhound to report on. An example could be the virus definitions version of '*McAfee VirusScan'* – a customisation included by default with systemhound.
2. Click on the **Current Registry Software** tab and then click on the **Add Registry Software** button.
3. Fill in the Description, Manufacturer, Registry Key and Registry Value fields as shown in Fig 7.6. The Registry Key value is case sensitive and must be entered in square brackets ([]) although these will be put in automatically should you omit them.
4. Click **Add** and continue manually adding more software. Click **Done** when finished. Once you have finished your customizations, save your changes by clicking **Save Custom Configuration**.

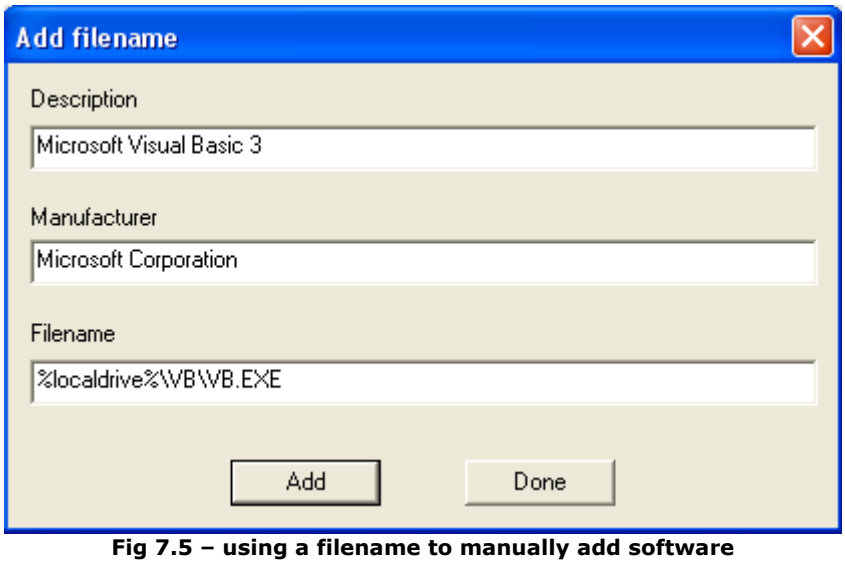


Fig 7.5 – using a filename to manually add software

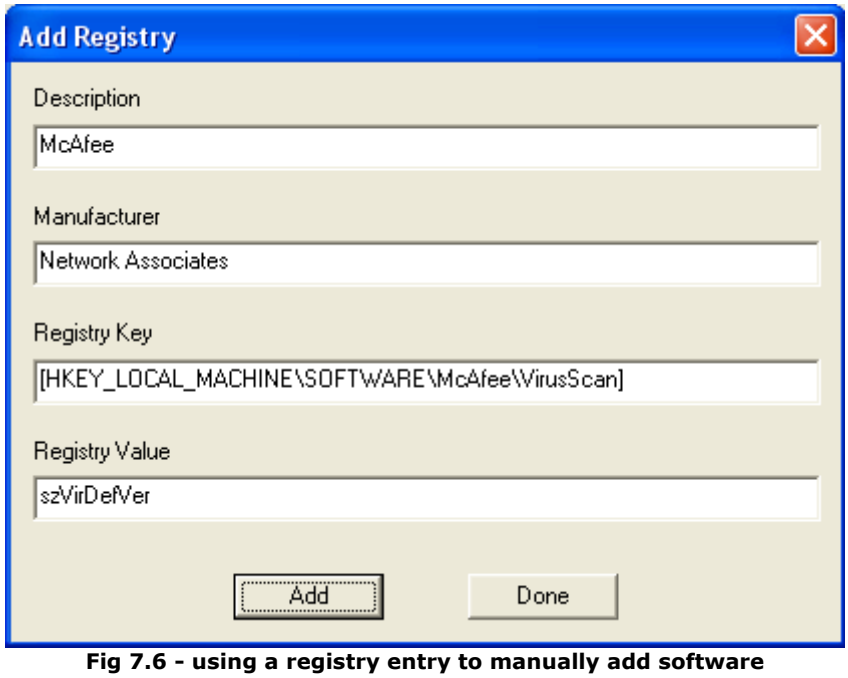


Fig 7.6 - using a registry entry to manually add software

Using an INI file entry

1. This feature allows you to add software manually as defined from an INI file or to add additional product details that you wish systemhound to report on. An example could be the virus definitions

version of '*Norton Antivirus'* – a customisation included by default with systemhound. Fig 7.8 shows you what a typical INI file looks like.

2. Click on the **Current INI Software** tab and then click on the **Add INI File Defined Software** button.
3. Fill in the Description, Manufacturer, Filename, Section and Value fields as shown in Fig 7.7. Note that the Section and Value fields are case sensitive.
4. Click **Add** and continue manually adding more software. Click **Done** when finished. Once you have finished your customizations, save your changes by clicking **Save Custom Configuration**.

Fig 7.7 - using an INI file entry to manually add software

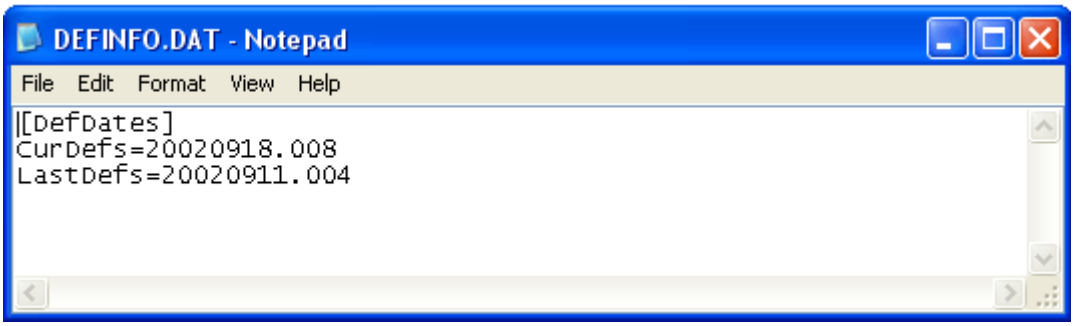


Fig 7.8 – an example of a typical INI file: Definfo.dat contains Norton Antivirus definitions versions

8: Uninstalling systemhound

The systemhound client software can be removed in a number of ways: using the Install Wizard, using the Central Configuration Tool, or manually. The systemhound server can be uninstalled from its Add/Remove Programs entry.

Uninstalling clients with the Install Wizard

The Install Wizard can be used to uninstall systemhound clients from Win NT/2000/XP/2003 machines. You must use an administrator account to uninstall clients.

1. On the **systemhound server**, go to `Start/Programs/systemhound/Tools/Install Wizard`. This will open the Install Wizard.

2. Choose the **UnInstall** mode (Fig 8.1) and click **Next.**

systemhound : Introduction
Welcome to the systemhound remote installation utility. This tool enables you to install systemhound onto multiple Windows NT machines from the systemhound central server. You will require administration account details for the machines you select as targets and you must be running under an administrators account.
Select Mode:
Install
UnInstall
Licensed to :
Software Innovations UK Ltd
License detail :
4105 of 5000 used
systemhound.com
< Back
Next >
Cancel

Fig 8.1

3. This will show the domain / workgroups installed across your Microsoft Windows Network. Now select the machines from which you want to uninstall the systemhound clients. Add them by clicking on **Add**, as shown in Fig 8.2. To uninstall all Win NT/2000/XP/2003 clients on a domain, choose the **Add Level** option. If uninstalling across domains, you will be prompted to enter the admin username and password for that domain. This must be entered using the **`domain\username`** format. Alternatively, you can find a machine on the network by name or IP address by choosing the **Find** option.

4. Click Next. The next screen (Fig 8.3) shows the list of machines you have selected to uninstall from. Click on **UnInstall** to begin the process.

5. The Install Wizard will now begin to uninstall clients from the selected machines. (Fig 8.4)

6. The final screen (Fig 8.5) shows the outcome of the uninstallation process, indicating whether all clients were successfully uninstalled or not.

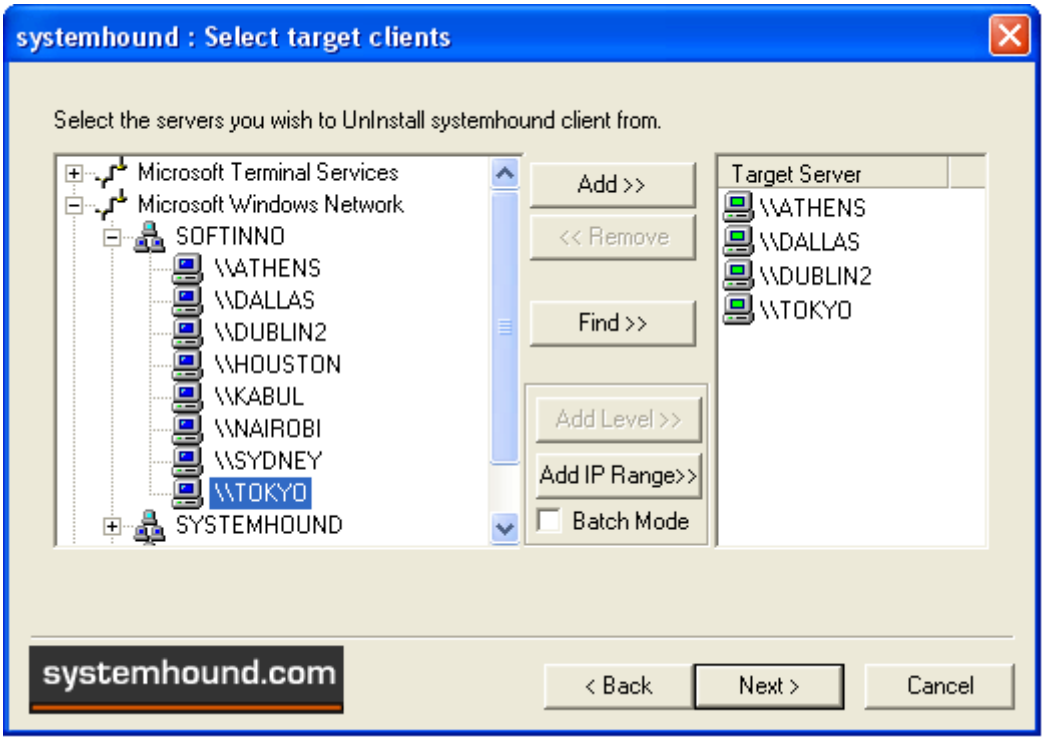


Fig 8.2

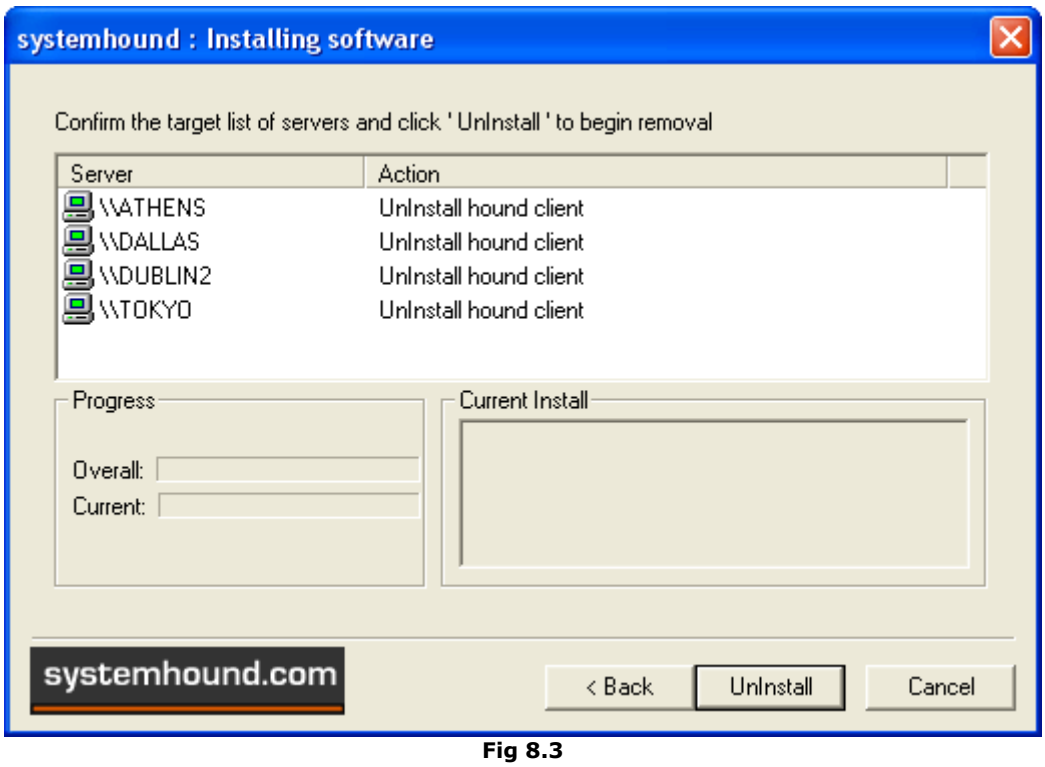


Fig 8.3

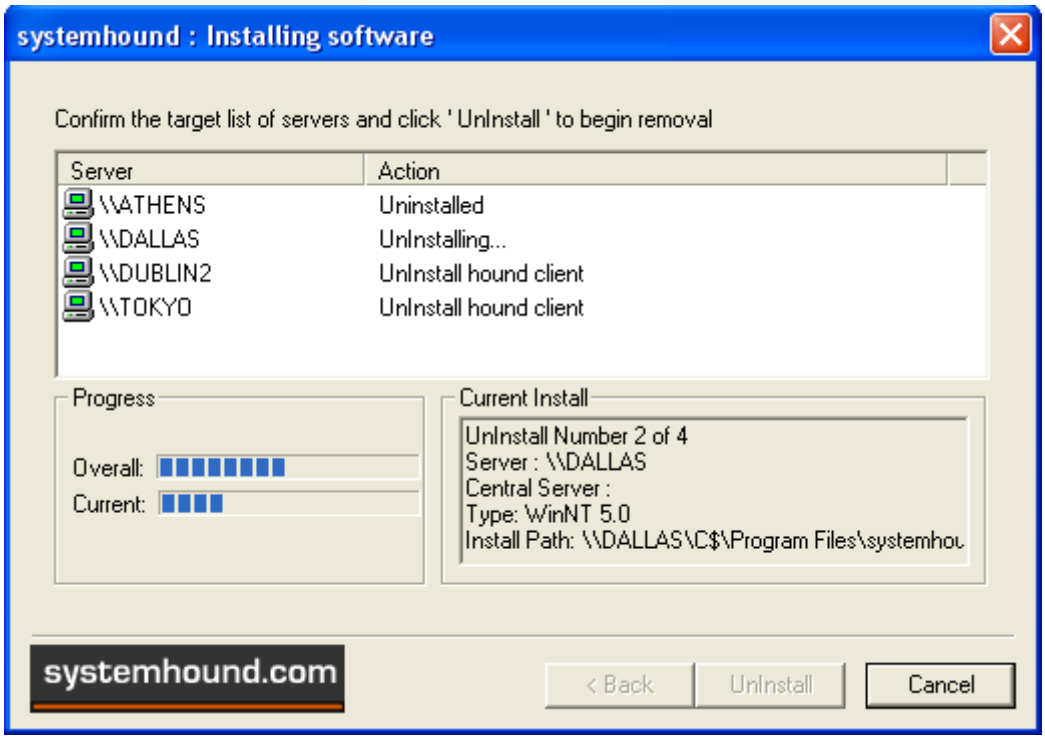


Fig 8.4

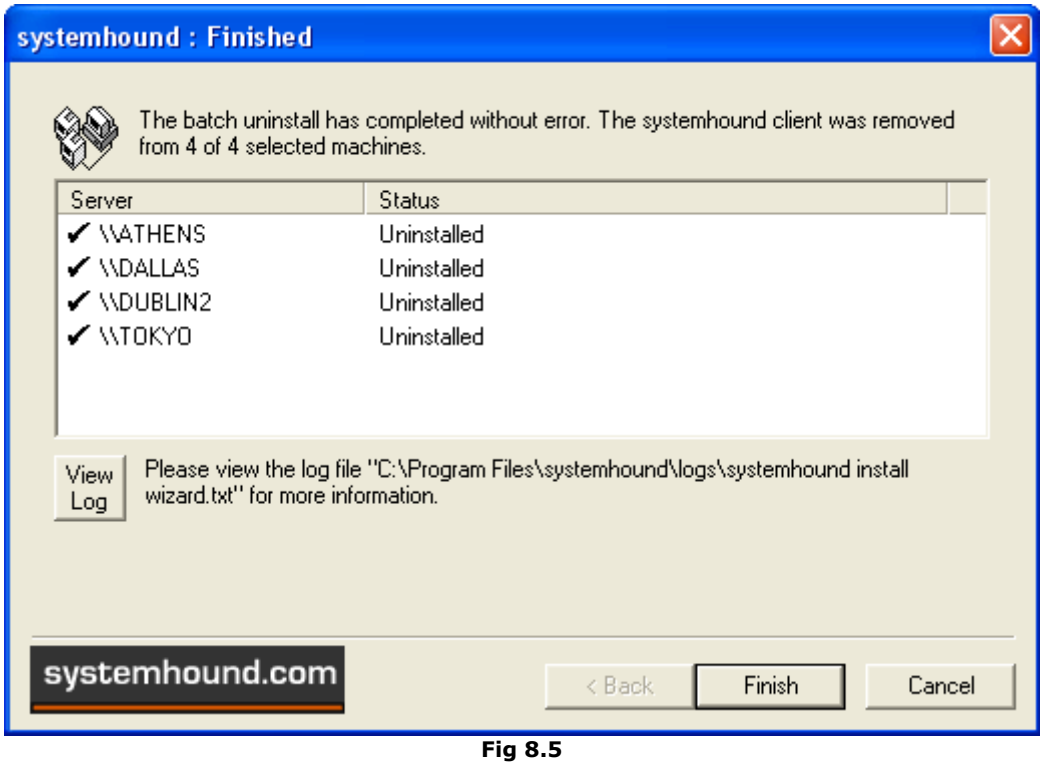


Fig 8.5

Uninstalling clients with the Central Configuration Tool

The Central Configuration Tool offers an automatic uninstall option whereby all clients will uninstall themselves from the user machine after the inventory scan has taken place. This option uninstalls the client from all machines within that Operating System group and can be carried out on Win 95/98/ME/NT/2000/XP/2003.

For more details on how to enable this option, see **Automatic Un-installation of client software** in Section 4.

Uninstalling the systemhound server

To uninstall the systemhound server, uninstall it from **Add/Remove Programs** in Control Panel.

Note: Before uninstalling the systemhound server, you may wish to keep the **Program Files/systemhound/easy-audit/site** *folder as this contains details of any software you have chosen to hide from the software report, and any software that you do not want to appear on the software change report.*

Manually uninstalling clients

To manually remove the client software from user machines of any Operating System, you need to do the following:

On the user machine, open a command prompt in the `Program Files\systemhound` directory and enter

```
shservice -remove
```

From the registry (Start/Run/regedit), delete the key at

```
HKEY_LOCAL_MACHINE\SOFTWARE\SYSTEMHOUND
```

Then delete the systemhound folder from the Program Files directory.

This will remove the systemhound client completely from the user machine.

9: Troubleshooting

This section deals with some of the common issues encountered by systemhound users. Please also see Section 10 on FAQ's.

1 While using the Install Wizard, I get errors like:
Invalid account/password – the network name was not found (0x35) or
Failed to find Program Files location - Access is denied (0x3e5)
First, ensure you use the correct admin username and password for the domain you are installing to and use the **`domain\username`** format. Also, ensure that the machine is actually switched on. If it continues to fail, the Install Wizard is probably failing to access the registry on the target machine. Open up the regedit utility on the server (Start/Run/regedit), click on File, Connect Network Registry, and enter the name of the target machine and click OK. If it fails to connect, check to see if the Remote Registry service is enabled on the target machine (Win 2000/XP). If it does connect, see if you can get to HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\ProgramFilesDir. Access to the registry is required for systemhound to install a client remotely.

2 I am installing hundreds of clients to a different domain. I don't want to keep entering the username and password!
Log off that domain, and login to the domain you will install clients to. Now open the Install Wizard and add the clients from this domain. You will not be prompted for a username/password.

3 How do I install clients across a router into different subnets? I have no problems with client machines in the same subnet, but I cannot see the ones across a router.
The problem is most likely to be with the router configuration, which is not configured to route packets between the systemhound server and the machines on the other side of the router. Test this by opening Network Neighbourhood on the systemhound server and see if it displays these other machines. If no, you need to change the router configuration to allow packets to be passed across. If there is a firewall between the networks, the systemhound port (4004) will need to be opened (see Section 10 on FAQ's for more information).

4 I am using the Install Wizard and I get an error, 'Failed to find Program Files location – Access is denied (0x3e5)'.
The Install Wizard has failed to read the system location of program files from the registry at `HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\ProgramFilesDir`. The client software is installed in the Program Files directory but systemhound cannot access the registry. See if you can remotely connect to the registry, as explained in 1 above.

5 I get an "Unable to initialise variables" error when using an InstallShield silent install method to install clients.
Ensure you use the SMS switch in your install script, e.g. setup –s –SMS

6 We have installed systemhound on a server which has very restricted access. I want my administrators to be able to use the Install Wizard to install clients but they are not allowed access to this server and they cannot use the Install Wizard if it is not on the systemhound server.
Set up a temporary systemhound server on another machine; this will be an unlicenced version. Use the Install Wizard from this to install clients, ensuring that the server name is changed on the 'systemhound: Central Server' dialog (Fig 2.3) to that of the actual systemhound server. Thus, you can roll out all the clients in this way and connect them to the actual server. Afterwards, simply uninstall the systemhound server from this machine. Licensing is not affected as the systemhound clients will be connecting to the actual server.

7 I am installing clients by 'ghosting'...why do the machines keep overwriting each other

on the reports?
You have duplicate ID's on your machines (Refer to 'Deployment Using Drive Imaging Software' in Section 2 for more details.) Delete the duplicate ID using the Website Maintenance Tool (see Section 6).

8 Why are the host names from my Win 9x computers the same?
The DNS hostname is reported by systemhound, not the NetBIOS name. The hostnames reported will be as identified within winipcfg on Win 9x. (Go to Start/Run on a Win 9x machine and enter winipcfg. This opens the utility. Click More Info to see the hostname systemhound reports). Right click on Network Neighbourhood and select Properties, click on TCP/IP properties. Click on the DNS Config tab, enable DNS, and enter the correct computer name in the hostname field and the domain in the domain field. Click OK and reboot. This should now change the hostname within winipcfg and it will then be reported correctly by systemhound on the next scan

9 I have a duplicate machine on the database.
You may have re-formatted the user machine and re-installed the systemhound client. This gives it a different identifier (GUID) and counts as a 'unique' machine in systemhound. To rectify this, remove one of the duplicate machines from the database using the Website Maintenance Tool (see Section 6). In future, you should try and maintain the systemhound GUID by taking a backup before re-formatting the machine. To do this, export the registry key at **`HKEY_LOCAL_MACHINE\SOFTWARE\SYSTEMHOUND`** to a floppy, rebuild the machine, import the registry key back in to the machine, and then re-install the systemhound client. This ensures there are no duplicates in the database and you will also be able to maintain the hardware change history on the machine.

10 I deleted my database so as to start afresh – why are my old hardware changes still showing?
You should delete your browser cache. Go to Tools/Internet Options on your browser, select Delete Files, and click OK. Refresh your browser and you should not see old data any longer.

11 We moved systemhound to a different server and now it says 'unlicenced evaluation'
Systemhound is licenced for a particular hostname. If this changes, the product reverts back to an evaluation copy. You will need to re-install all systemhound clients in order to point them to the new server and you will need to be re-licenced. Contact your reseller or distributor for re-licensing, or email support@systemhound.com.

12 Some of my remote machines are not sending data to the server.
Remote client machines across bridged routers, etc, may be encountering network difficulties and may not be able to upload data within the allocated time. Increase the timeout from 90 seconds to a higher figure. This has to be carried out on the user machines by increasing the value of the **`timeout`** key within the registry at **`HKEY_LOCAL_MACHINE\SOFTWARE\SYSTEMHOUND\SHSERVICE`** to something like 5000.

13 The software count for Adobe Acrobat is wrong!
You may find, if you have Adobe Acrobat (Writer) and Adobe Reader installed across your enterprise, that the software count for Adobe Acrobat is incorrect and systemhound records more copies of this application than you actually have. This is because both Reader and Acrobat are defined by identical filenames, with the result being that they report twice. Do the following to get an accurate reading of Adobe Acrobat:

- Click on Adobe Acrobat to bring up its detailed software report
- Click on the + sign next to where it says 'x locations have been used to identify this software as being installed'
- You will now see the locations from where the software was identified; *the Program files location and the number of times the software is discovered at this location equals the number of actual copies of the software*.

14 Some of my Network Interface Cards are not being recognised. They are displayed as NDIS5. I would like to see the actual card.
The NIC description comes from NetBIOS and is often different from that reported by Windows. The issue is trying to relate the Windows description to a NetBIOS name. What systemhound reports

will be mirrored by ipconfig /all (when entered from a command prompt).

15 My Windows 2000 machines are showing the Asset ID as '000000000/To Be Filled'. What can I do about this?
Unfortunately this is the description as reported by the BIOS on the machine. It may be worth trying to enter the information directly into the BIOS yourself, or your manufacturer may have a utility to do this.

16 My machines seem to have stopped reporting to the server!
Check to see if the systemhound easy-audit site builder service is running on the server. If its not, re-start it.

17 The 'Maximum memory' on the detailed hardware report for my computer is showing as 512Mb, but this does not appear to be accurate.
This value comes from the SMBIOS tables in memory which the BIOS populates. We have found that this value can sometimes be incorrect. Please contact your motherboard manufacturer for a possible BIOS update.

18 I want to input the same custom fields across all my Operating Systems. Is there a quicker way of doing this than inputting the same information manually?
To copy these fields across to other Operating Systems quickly (from Windows 2000 to XP for example), save any changes to the Central Configuration, then on the systemhound server, go to **Program Files\systemhound\Release\Windows2000\Plugins** and copy the file **custinfo2.dat** to **Program Files\systemhound\Release\WindowsXP\Plugins.**

19 Why does the 'last logged on user' field state unknown?
This occurs if a policy has been set to prevent the last logged on user from being displayed. If **HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Policies\System\DontDisplayLastUserName** is set to 1, the last logged on user name is not displayed. If this is set to 0, then the last user name is stored here: **HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WindowsNT\CurrentVersion\Winlogon\DefaultUserName**. If you wish to retain your policy settings but still want to capture last logged on user information, you can collect the data and display it as a user-defined field. To do this, include the following in a login script:

```
echo %username% > C:\temp\lastuser.txt
```

Now you can configure systemhound to pick this information up and put it into a user-defined field. See User Defined Fields, Section 4 for more information.

20 I uninstalled some software but systemhound still reports it as being installed.
If the software does not uninstall cleanly and leaves entries in the registry, systemhound may detect these and report the software as still installed. Ensure that the software is uninstalled properly to prevent this happening.

21 I want to rebuild my systemhound server. The server will still have the same name, how do I go about exporting all the information from the existing machine?
First back up your database: Copy the hardware and software folders from **Program Files\systemhound\easy-audit** to a temp location. Install systemhound on the new server, using the systemhound executable. Then apply the licence. Then go into **Program Files\systemhound\easy-audit** and delete the hardware and software directories completely. Now copy in the hardware and software folders that you previously backed up. You will now have your database restored. This method can only be used if the version of systemhound remains the same, ie. you cannot upgrade systemhound and copy the database back subsequently

22 While running shscan.exe, I get an error: FindFirstFile:InvalidArgument
This error occurs due to a corrupted file on the machine and should be ignored. It does not affect the outcome of shscan.exe, which continues to do a full disk scan and generates the required text file.

23 While trying to run shscan.exe, I get an error: 'failed to locate plugins directory'

This error occurs if you are trying to run shscan.exe on a machine which does not have a systemhound client installed. Install the client first before running shscan. The error can also occur if the user does not have access to **`Program Files\systemhound\Plugins`**. Ensure that the user can access this directory.

24 Some software shows the version number as 'unknown'. Where are the version numbers retrieved from and is it possible to get systemhound to look at other things, such as a date stamp to retrieve the version number?

The version numbers come from the properties of the executable. Right click on the exe and click on the properties tab. You'll find that the majority of software which returns 'unknown' will be Add/Remove Programs defined software. Most major software manufacturers should have a version number defined for their entries in Add/Remove programs. If it displays as 'unknown' you could add the **`DisplayVersion`** (String Value) into the registry location of the software, but this would need to be done on every machine the software is located on.

25 My custom fields are not showing on the reports / after editing the custom fields, the old information still shows up.

By default, Custom Field information is scheduled to be retrieved every 7 days. Change this within the Central Configuration to the same schedule as the System Information (hardware scan). To test this, you can always run shrefresh.exe on the client machine (copy shrefresh.exe from Program Files\systemhound\utils on the server).

26 Why doesn't systemhound show all my users' printers?

On Win NT/2000/XP, its to do with the profile it was installed under (HKEY_CURRENT_USER in the registry). Systemhound scans using the system account, so if printers are installed just for a specific user, they won't show up. On Win 9x, user profiles don't exist hence all the printers are displayed.

27 Cannot find C:\Program Files\Systemhound\easy-audit\hardware.htm?maintenance

If you are getting that error message while trying to start Website Maintenance on the systemhound server, you need to install IE6 SP1

Note: You can view the latest FAQ's and support information online at http://www.softwareinnovations.co.uk/forum

10: FAQ's

General

1. **How much disk space does the systemhound easy audit database need?**
   Approximately 20 Kb per machine to record hardware and software details, although this will vary depending on the amount of software collected. For example an estate of 1000 machines would need a total of 20Mb.

2. **How secure is the systemhound easy audit database?**
   The data is held in a file system format that is generally located on a central NT/XP machine. Access to this data for users is either via an IIS website or direct file system access. If an IIS website is used then it should be configured to use your Intranet security model, and if a file system model is used your NT Administrator should ensure that only read access is given to users. This applies to NTFS file systems.

3. **Can systemhound audit notebooks/laptops and stand-alone computers?**
   The systemhound client can be installed on to notebooks/laptops the next time they are connected to the network. The client will then report to the server whenever it detects a network connection. For machines which are stand-alone, use the Stand Alone Audit tool (see page 20).

4. **If a laptop user has not logged on to the network for a week, will an inventory take place as soon as the user logs on?**
   The inventory is carried out according to the schedules the client has received from the server; by default this is once per day. However the data will not be transferred to the systemhound server unless an IP address is present. Therefore when a user logs on to the network, systemhound will detect an IP and within a few minutes will transfer the data to the server.

5. **I am reformatting a machine. Is there anything I should know?**
   It is recommended you maintain the systemhound GUID if you reformat a machine (as opposed to replacing it) as this enables you to maintain the hardware change history for the machine. The GUID is the unique identifier that systemhound allocates to a machine. Export this from the registry using regedit, from **HKEY_LOCAL_MACHINE\SOFTWARE\SYSTEMHOUND**, to a floppy or elsewhere on your network. Reformat the machine, and import this key back into the registry *before* re-installing the systemhound client.

6. **Does systemhound audit screensavers?**
   At present, it does not audit .scr files specifically. Many screensavers *are* detected, as they have entries in Add/Remove Programs or are executables.

7. **What does 'Force Resend' do in the Central Configuration?**
   This causes a plugin to run immediately, instead of at its scheduled time. This option is useful if you need to see current hardware and software data and cannot wait until the scheduled times. For example, your hardware inventory is set to run every week but you have an urgent need to see current data. Instead of changing the schedule to run a scan every hour and changing it back later to 1 week, clicking on **Force Resend** will 'force' a scan. This will be received by clients when they communicate with the server, which is every hour by default (set in the **systemhound data upload** field in the Central Configuration Tool). A scan will then occur and the data is sent to the server at the next data upload session (every hour). What this means is that within a maximum of two hours of clicking on **Force Resend**, you will be able to view updated inventory data.

Installation and Clients

8. **When installing clients through a login script, will systemhound install each time a user logs on or does it detect whether it is already installed?**
   If a client is already installed, it will not attempt to re-install.

9. **How large are the clients?**
   The client software is 1.2Mb.

10. **If the client is not logged on to a domain, will it still send data to the server?**
    Yes, the user does not have to log in to the domain where the server is present; as long as the client can 'access' the server via TCP/IP, it will be able to send data across.

11. **What happens if a client machine is switched off before a scheduled inventory scan is due to take place?**
    The scan will take place the next time the machine is switched on.

12. **I don't want to wait. I want to run a scan on this machine NOW!!**
    If you need to see current data from a machine without waiting until it next reports to the server, run the **shrefresh.exe** utility on the machine. Map a drive to the server, and run shrefresh.exe by double clicking it from Program Files\systemhound\utils. An inventory scan will immediately take place and the report should be visible on the server within a minute.

13. **Can the systemhound clients communicate and send data to the systemhound server over the internet and not just on a LAN?**
    If the systemhound server has a public IP and is visible to the remote clients, then yes it can.

14. **Will systemhound work where dial-up connections are used to connect to the network?**
    Yes, the data files are light and will not cause any problems over a dial-up. The systemhound client does however need to be installed in the first place.

15. **Will systemhound work over a VPN?**
    Yes, as long as the client machine can communicate with the remote systemhound server, systemhound will work.

16. **Can I use a login script to install to Windows NT/2000/XP/2003 machines?**
    No, on WinNT/2000/XP/2003, admin privileges are required to install services. Unless you grant local admin rights to your users, you won't be able to use login scripts. The Install Wizard is the recommended method of installation to use.

17. **What port do the clients communicate on?**
    4004. This is configurable by your network administrator, see below.

18. **Can I change this port? We usually block the port you use to transmit data. Can you program the server and client tools to operate over port 80 or 443?**
    TCP ports < 1023 are known as 'reserved' and are not generally used by third party software vendors. The systemhound site builder will try to 'bind' to the port which effectively means locking it exclusively. So if port 80 was used and systemhound started up, IIS would not start as it too would try to bind to port 80. If IIS was not running on the server running systemhound this would not be a problem, but is unlikely if you wish to view the reports over your intranet. To change this, you should do it in the services file, usually in `WINNT\system32\drivers`. Put in a line like follows:

    ```
    systemhound         [new port no]
    ```

    This will need to be done on all client machines as well, so use a batch script or similar technique. Your network administrator will be familiar with these. An example is:

    ```
    echo "systemhound 443/tcp" >> %WINDIR%/C$/SERVICES
    ```

19. I have installed the systemhound server and have since added another hard drive to this machine. I want to move the software to the other drive with the minimum amount of work at the client level.

The systemhound server software has to be installed on the system drive and cannot be installed anywhere else. The easy-audit website can be installed on another drive and you are given this option when installing the server. To move the website at a later date, stop the systemhound site builder service from Services in Control Panel, move the systemhound\easy-audit folder to its new location and change the values of **web_site** and **web_site_start** from within **HKEY_LOCAL_MACHINE\SOFTWARE\SYSTEMHOUND\EASY-AUDIT** to the new values. Re-start the sitebuilder service. No changes need to be carried out on the clients.

Hardware and Software Inventory

20. Why is some of my hardware information shown as 'Unknown'?

Some of the data is generated by interrogating the BIOS using an interface known as SMBIOS (Systems Management BIOS). Older machines (especially those manufactured before 1998) may not have this interface available for systemhound to interrogate and some hardware information will show as 'Unknown'. This information includes: **SMBIOS Level, Manufacturer, Model, Asset ID, Memory Chips, Memory Slots** and **Maximum Installable Memory**. It may be possible to upgrade the BIOS of machines which exhibit this by checking for later BIOS revisions from your PC manufacturer. If SMBIOS interrogation fails, WMI is used; however this is only as a last resort and WMI is only installed by default from Windows 2000 onwards. WMI is also used if SMBIOS cannot be accessed directly. Not all information may be available on all SMBIOS compliant machines but if it is present systemhound will report it.

21. What about information on memory banks and slots, and memory type?

The memory bank and slot information is available but not reported, as it was deemed to not be of any real value for the majority of users. The memory type is reported by the BIOS but is currently seen to be very unreliable.

22. Does systemhound report dual graphics cards?

It reports the primary card only, currently.

23. I need to change the audit to pick up a particular file if it's present on client machines. Is this possible?

Use the Custom Software Tool to manually add in the filename and a location (see Section 7). You can use environment variables for the file location and you can input several different locations where you think the file may be present, by adding the entry in once per location. For example, you want to detect a file called SP1PACK.LST on client machines, which you expect to be in the Temp directory. Input this information by clicking on **Add Software Manually** in the **Current File Software** tab. Once entered and saved, the changes will be sent to the clients when they next communicate with the server.

The web reporting and database

24. Can I manually edit the systemhound easy audit website?

No, under no circumstances should the systemhound easy audit **.htm** and **.js** files be manually edited. This is because the files are held in an optimized format and any changes may impair your reporting performance and data integrity.

25. How can I reset the database and rebuild from scratch?

To rebuild the systemhound easy audit database you should delete the following directories (and their contents) from your system:

```
Program Files\systemhound\easy-audit\hardware
Program Files\systemhound\easy-audit\software
```

No other files or directories should be modified or deleted. As new log files are received the database will be re-constructed. Attempting to view the website before any logs have been received and applied to a new database will result in 'This page cannot be displayed' error messages.

26. Why do I need to enable cookies in my browser?

systemhound uses cookies to remember what page of hardware or software you are viewing and items such as how many machines are being displayed on each screen. If cookies are not enabled revisiting either the master hardware or software pages will reset to the first page and the default setting will be used to display the systemhound data. Site preferences will be reset if the systemhound website is not used for a period of 15 minutes unless you have selected the 'Remember my settings' option, in which case the preferences will be retained for 12 months.

27. Can I view the web reports via the internet?

You can if your browser has http access to your systemhound website. However systemhound has been developed to not require any server-side technology and the files that are downloaded to the client browser can therefore become quite large and slow to display over internet links such as dial-ups or slow dedicated connections.

28. How can I see which of my machines have not sent data to systemhound recently?

On the hardware report, click on “updated” in the heading line. Click again to see which PCs have sent data most recently, by reverse-sorting the data by update date/time.

29. Can I filter the results or refine the results to only reflect machines in certain physical locations?

This can be achieved using the custom fields and exporting the data to CSV format and manipulating the information in a database. Use the custom fields to input a location for each pc (see Section 4). Export the data to CSV (see Section 5). To see the hardware by location, you can filter the data by the location. For software, you could import the CSV data into a SQL database and do a query based on the join of the two tables. MS Query can also be used. This is a free tool provided with Excel (see Appendix B). For those familiar with VBScript, this can also be used.

Another solution is to set up separate systemhound servers for each location, and may be preferable in certain situations. For further information, refer to your reseller.

30. I have active desktop running on my machines. Can I have a link which displayed the hardware details - i.e. a single URL to display the hardware details for a particular machine?

Using the regedit utility on the client machine, find the machine_id key at **HKEY_LOCAL_MACHINE\SOFTWARE\SYSTEMHOUND**. This is the machine's unique identifier to systemhound. It is possible to create an URL for the webpage by extracting this value using VBScript or similar. The URL will be in the following format:
http://server/systemhound/hardware/EF/4FF0A7F1-A0E9-492B-A68C-3794854963EF.htm The EF relates to the last two letters in the machine identifier.

31. How can I automate the export of CSV data, for example on a nightly basis?

Set up a job I Windows Task Scheduler to do this. The CSV Export tool has command line options, so create a batch file and call this. For example:

```
"C:\Program Files\systemhound\utils\shexport" -s -hwfile -swfile
```

Save the above line as export.bat, and then create a new task in Windows Scheduler and call this file.

32. How do I automatically export the data to SQL Server?

Install the MS SQL client software onto the systemhound central server. Create a .bat file to run the shexport tool from the command line (see Exporting Data using the Command Line, Section 5). Create a .bat file to run **bcp** (SQLServer's Bulk Copy utility) to load the exported file into the database. For this to work you will need to create the tables within a SQL database beforehand, and produce a .fmt file to describe the columns in each table. The required arguments for bcp can be found by running bcp /?

It may be best to create a single .bat file to run both the shexport and bcp jobs, and use the Windows scheduler to run them.

33. How do I set up the systemhound website if IIS is installed on a machine other than the systemhound server?

You need to configure IIS to show the website that is located on the systemhound server, at **`Program Files\systemhound\easy-audit\index.htm`**. Open up IIS from Control Panel\Admin Tools\Internet Information Services. Then drill down to default web site and right click and choose New\Virtual Directory. Follow the wizard through.

Note: You can view the latest FAQ's and support information online at http://www.softwareinnovations.co.uk/forum

Appendix A: The systemhound collector service

Description

The systemhound Collector (SHC) is a service that runs on the systemhound server. Its job is to accept logged information from systemhound user machines and make sure that the user machines are kept up to date and are consistent with released systemhound software. The SHC runs as a service on Windows NT/2000/XP/2003.

The SHC uses the TCP/IP protocol to accept connections from machines that are contacting the systemhound easy audit server. The communication session can involve both the upload and download of files to and from the remote user machine.

Overview

During a session the remote machine identifies itself to the SHC and uploads any systemhound logged data to the SHC server. Having completed the upload process, the remote machine will request the SHC to check for any new or new versions of systemhound programs that it is required to run. Should this be the case the SHC will deliver the new files to the user machine in a download process. Once the session has been completed the user machine will initiate a closedown of the systemhound session.

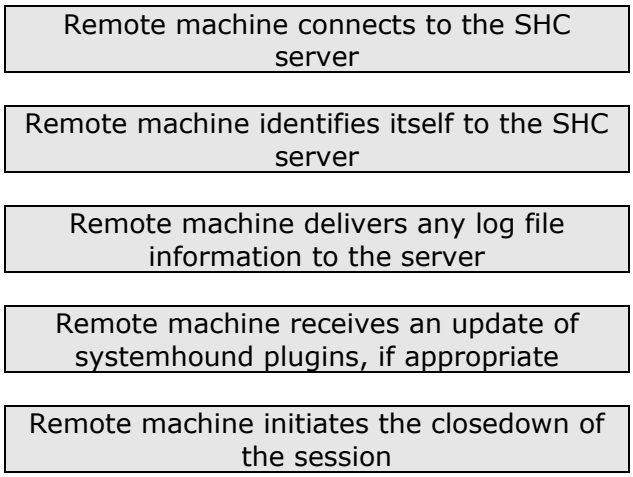

Remote machine connects to the SHC server
Remote machine identifies itself to the SHC server
Remote machine delivers any log file information to the server
Remote machine receives an update of systemhound plugins, if appropriate
Remote machine initiates the closedown of the session

Figure A1: sample session

Transport

The protocol used by the SHC to communicate with the remote machines is a custom designed protocol running over the TCP/IP transport layer. The TCP/IP port, which is used to accept calls by the SHC, is configurable by the systemhound Administrator. By default, systemhound uses port 4004.

Security

The SHC session with the remote machine is secured by the use of an encryption algorithm. All data transferred to and from the SHC is in encrypted form, which will prevent the 'sniffing' of data on the network. In addition, the use of an encryption method prevents the 'spoofing' of systemhound sessions.

Network traffic

The SHC session has been designed to minimise the amount of network traffic that is generated during a typical session. The systemhound log files containing the inventory data are compact in themselves. Typically they are between 10-40Kb depending on the amount of software present on the user machine. All systemhound programs that are used by the remote host are compiled to be optimally small in size – typically less than 50KB.

The frequency at which the remote client communicates with the SHC is configurable through the Central Configuration Tool. The more frequently the client is configured to communicate with the SHC, the more network traffic will be generated. However, it should be noted that network traffic would be minimal if no updated log file or systemhound plugins are available.

	Recommended frequency
Minimum	1 hour
Maximum	24 hours

Figure A2: recommended data upload frequency

Note: Although it is possible to change the frequency of connection through the Central Configuration Tool, it should be remembered that the clients would only be updated at the time of the next connection to the SHC. Therefore if the client was previously configured to connect to the SHC every 7 days, an updated connection rate of 24 hours may take seven days to propagate to the client. However, the Force Resend option would send the configuration changes immediately.

Appendix B: Creating Reports

This section offers advice on creating reports from the CSV data and how to use the included scripts. Use the CSV Export Wizard to export your data first.

Using the Hardware CSV Report Example Script.

This script file is an example of how to execute SQL queries against an exported hardware.csv file without the need to use a database. The file is called **Hardware CSV Report Example.vbs** in `Program Files\systemhound\easy-audit\export`.

To use the example provided, you will need to have already generated a hardware.csv file. The script defaults to using `C:\ProgramFiles\systemhound\easy-audit\export\hardware.csv` but can be easily edited in Notepad.exe. Windows scripting host will need to be present if your server is NT4.

Double click on the Hardware CSV Report Example.vbs script to execute it against the hardware.csv file. Click OK on the information dialog that pops up. The script proceeds to create a variety of reports on the hardware data and you are now given the option to view in Excel; if you choose No, the script proceeds to display each report on-screen in a pop up dialog. It is recommended you select Yes when prompted to view the reports in Excel. The reports will take a short while to display and your screen may flicker in the process.

The script generates the following graphs (see Fig B1 and B2 for examples):

Manufacturer v Model summary	**OS v Subnet summary**
OS Category v OS version summary	**OS v Modem summary**
OS v Memory summary	**Manufacturer v BIOS Version summary**
OS v Processor summary	**OS v Resolution summary**
OS v 1st Processor speed summary	**OS v C Partition Free Space summary**
OS v CD ROM summary	**OS v C Partition Type summary**
OS v Free Memory Slots summary	**OS v D Partition Type summary**
OS v Last Updated summary	

Using the Software CSV Report Example Script.

This is another example of using VBScript to perform a SQL query, and this summarises the data in software.csv by producing an application count. The file is called **Software CSV Report Example.vbs** in `Program Files\systemhound\easy-audit\export`.

Run the script file by double clicking it. Click OK on the information dialog that pops up. Excel will now open to display a summary count of all applications.

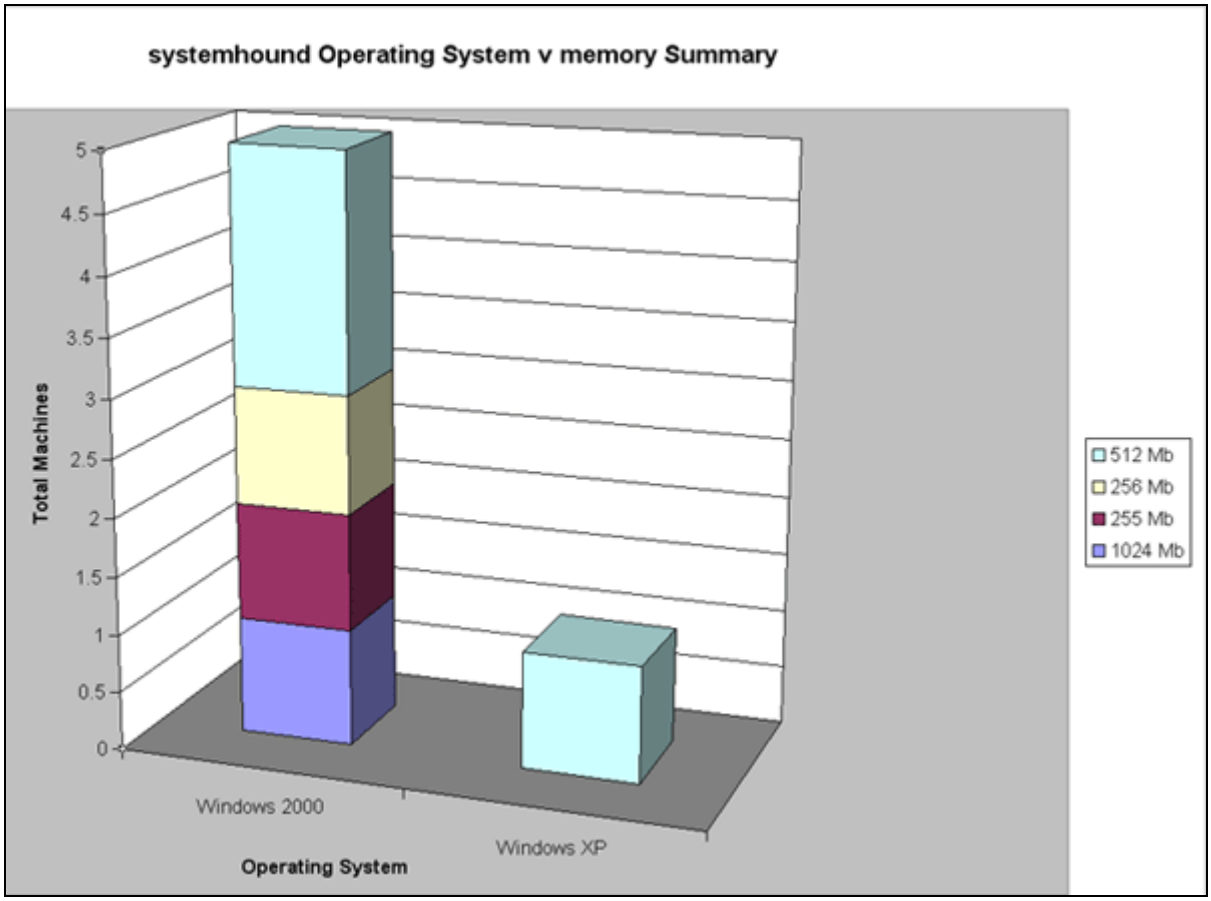


Fig B1 – a chart showing Operating Systems by installed memory

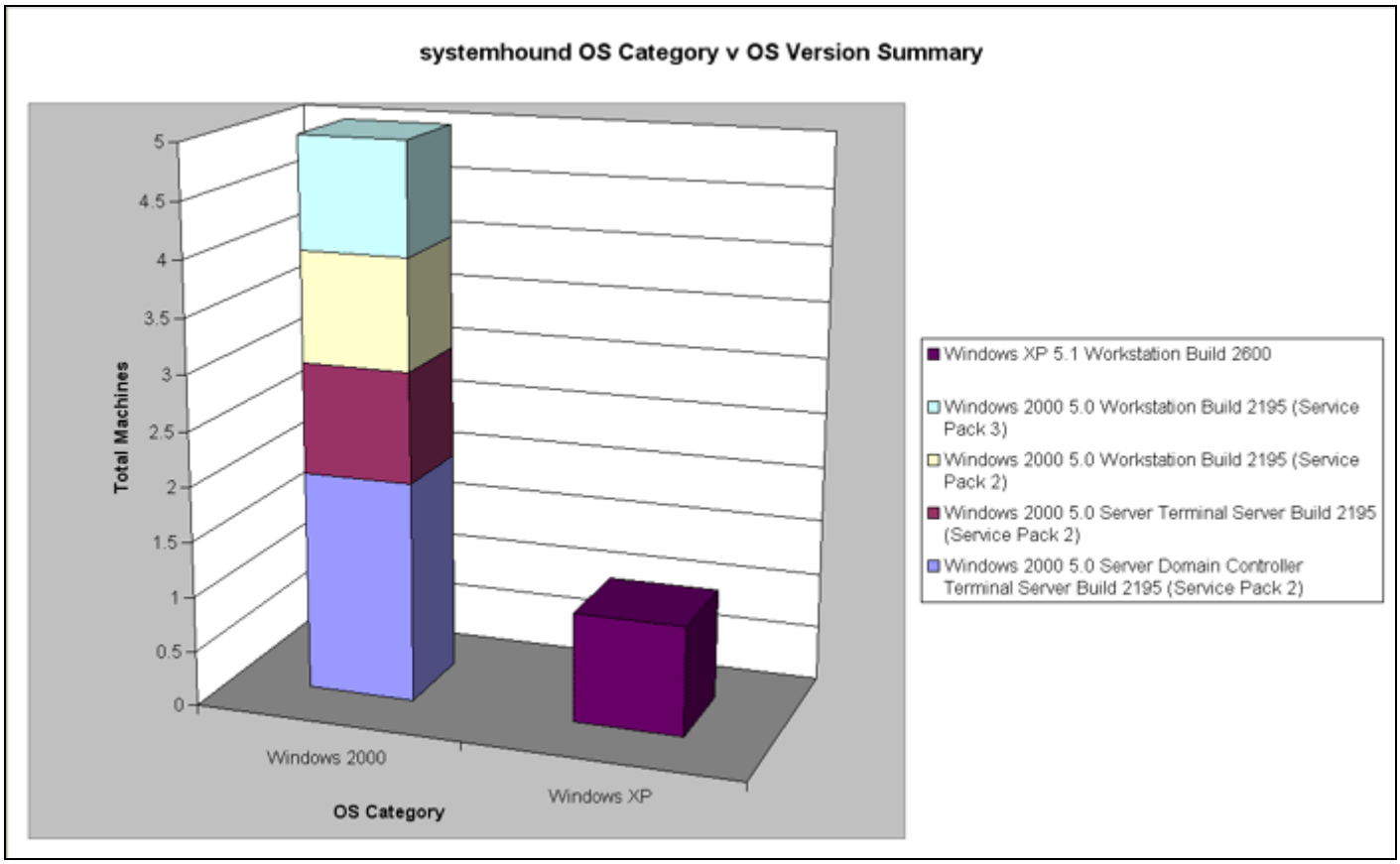


Fig B2 – a chart showing Operating Systems by versions

Using MS Query

MS Query is a very useful tool included free with Excel, and it enables you to perform specialized query tasks such as the following:

- Filter rows or columns of data before they are brought into Excel.
- Create a parameter query.
- Sort data before it is brought into Excel.
- Join multiple tables.

For example, Fig B3 shows a SQL statement querying the hardware.csv for machines with less than 128Mb RAM, ordered by manufacturer.

In Excel 2000, from the Data menu, go to **Get External Data** and choose **New Database Query**. This tool can also be opened up from `Program Files\Common Files\Microsoft Shared\VBA\MSQRY32.EXE`
In Excel 2002, from the **Data** menu, go to **Import External Data** and choose **New Database Query.**

You then need to set up a data source. Select **New Data Source** and click **OK**. This opens the **Create New Data Source** window.

In the first field, enter a name that you wish to give this source e.g. systemhound.

In the second field, select a driver. Choose **Microsoft Text Driver (*.txt; *.csv)**.

Click **Connect**. Uncheck the **Use Current Directory** box if checked and click on **Select Directory**. Browse to the folder containing your data files and click **OK**.

Now click **OK** to exit the **Create New Data Source** window.

In the **Choose Data Source** window, highlight your data source and click **OK**. This will now open the **Query Wizard – Choose Columns** window.

Select the columns you want from your data source and add them to the right hand pane. Click **Next** and proceed to manipulate the data within MS Query.

Note: We do not provide support on using MS Query. Use the Help on Excel for more information.

Using the pre-defined macro to hide columns

This is a useful macro included with systemhound that enables empty columns to be hidden in a hardware.csv file. You will need to export your hardware data to hardware.csv prior to using this macro. The code for the macro is in **Excel macro.txt** in `Program Files\systemhound\easy-audit\export`

1. Open up hardware.csv in Microsoft Excel
2. Go to **Tools->Macro->Visual Basic Editor**.
3. Select insert module.
4. Paste code from **Excel macro.txt** into module.
5. Choose File, Close and Return to Microsoft Excel.
6. You can then apply the macro to the current spreadsheet by selecting it from **Tools\Macros\Macros...**

This will hide all empty columns within the hardware.csv file, making it much easier to work with.

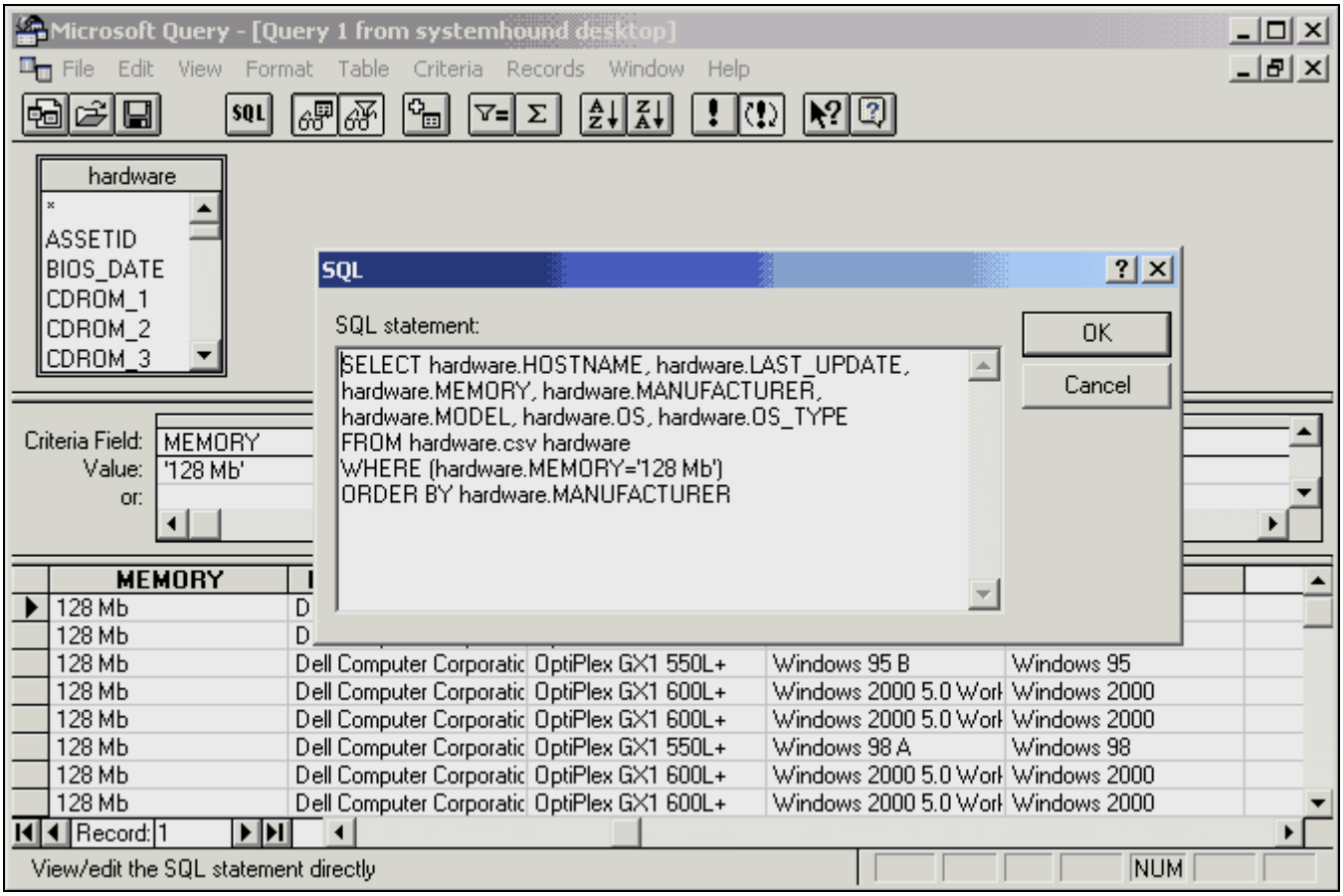

Microsoft Query - [Query 1 from systemhound desktop]
File Edit View Format Table Criteria Records Window Help
SQL
hardware
*
ASSETID
BIOS_DATE
CDROM_1
CDROM_2
CDROM_3
SQL statement:
SELECT hardware.HOSTNAME, hardware.LAST_UPDATE,
hardware.MEMORY, hardware.MANUFACTURER,
hardware.MODEL, hardware.OS, hardware.OS_TYPE
FROM hardware.csv hardware
WHERE (hardware.MEMORY='128 Mb')
ORDER BY hardware.MANUFACTURER
OK
Cancel
Criteria Field: MEMORY
Value: '128 Mb'
or:
MEMORY
128 Mb
128 Mb
128 Mb Dell Computer Corporatic OptiPlex GX1 550L+ Windows 95 B Windows 95
128 Mb Dell Computer Corporatic OptiPlex GX1 600L+ Windows 2000 5.0 Work Windows 2000
128 Mb Dell Computer Corporatic OptiPlex GX1 600L+ Windows 2000 5.0 Work Windows 2000
128 Mb Dell Computer Corporatic OptiPlex GX1 550L+ Windows 98 A Windows 98
128 Mb Dell Computer Corporatic OptiPlex GX1 600L+ Windows 2000 5.0 Work Windows 2000
128 Mb Dell Computer Corporatic OptiPlex GX1 600L+ Windows 2000 5.0 Work Windows 2000
Record: 1
View/edit the SQL statement directly
NUM

Fig B3 – MS Query

Defining your own custom macros

The following is a step-by-step guide to creating an Excel macro to format the hardware.csv file produced by the CSV Export tool.

1. Double click on the hardware.csv file in Windows Explorer. MS Excel will open the file with each column set to the Excel default.
2. From the 'Tools' menu, select Macro => Record New Macro. The 'Record Macro' dialog box will appear.
3. Edit the macro name and description if desired. Ensure that the value for Store Macro In: is 'Personal Macro Workbook'. This will allow the macro to be used with any future spreadsheet.
4. Click OK. The Record Macro box appears. Ignore this for now.
5. Type CTRL+A to select every cell in the worksheet.
6. From the Format menu, select Column => Autofit. Every column will be resized to fit the width of its text exactly.
7. Click in any cell to lose the every cell selection.
8. To hide unwanted columns, select every column that is to be hidden. (Left-clicking on the column letter can highlight entire columns. Multiple columns can be selected by dragging the mouse whilst holding down the left button).
9. From the Format menu, select Column => Hide. The selected columns will be hidden.
10. Repeat steps h), i) to hide additional columns if desired.
11. Click the 'Stop' button on the 'Record Macro' box.

12. Close Excel. When prompted to save changes to the hardware.csv file, select No. You will be prompted to save the changes to the Personal Macro Workbook. Click 'Yes'

Your macro is now available for use with any future worksheet.

Reusing your macros

1. Double click on the hardware.csv file in Windows Explorer. MS Excel will open the file with each column set to the Excel default.
2. From the 'Tools' menu, select Macro => Macros (or type ALT+F8). The 'Macro' dialog box will appear.
3. Select the macro you wish to run, and click on 'Run'. The worksheet will be automatically formatted as before.

Appendix C: systemhound log files

***collector.log* – on the systemhound server in Program Files\systemhound\logs**
details any errors encountered with the collector service which is responsible for collecting data from client machines.

***CsvExport.log* – on the systemhound server in Program Files\systemhound\logs**
details the data export process when using the CSV Export Tool.

***hwinfo.log* - on the clients and the server in Program Files\systemhound\logs**
details the hardware inventory process for the server and client.

***shmaintlib.log* – on the systemhound server in Program Files\systemhound\logs**
maintains an audit trail of all purge and delete functions carried out with the Website Maintenance Tool

***site_builder.log* – on the systemhound server in Program Files\systemhound\logs**
contains licensing details for systemhound and any errors encountered by the site_builder service.

***systemhound install wizard.txt* – on the systemhound server in Program Files\systemhound\logs**
details the installation and uninstallation process for systemhound clients installed using the Install Wizard.

***upload.log* - on the clients and the server in Program Files\systemhound\logs**
details the upload of data from the client to the server. Will contain details of any errors while attempting to upload data.

***systemhound install.log* - on the systemhound server in WINNT\Temp**
details the installation process carried out on the server using the systemhound executable. Will also be present on client machines if the executable is used to install the client.

Appendix D: Contact Details

Software Innovations UK Ltd
Kinetic Centre
Theobald Street
Borehamwood
Hertfordshire
WD6 4PJ
United Kingdom

Tel: +44 (0) 20 8905 1800
Fax: +44 (0) 20 8905 1272

Sales
Tel: +44 (0) 20 8905 1800
Freephone (UK only): 0800 634 8100
sales@systemhound.com

Support
Tel: +44 (0) 20 8387 4117
support@systemhound.com

For contact details of our worldwide partners and to find the one nearest to you, please visit our website at www.systemhound.com